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## AN ENGLISH VIEW OF AMERICAN AGRICULTURE.

In a recent conversation with the editor of one of our best western agricultural papers, he alluded to some articles he had written showing, from a number of analyses of new soil and of soil which had been under cultivation for some years, that our present system of tillage is radically defective—that it is rapidly exhausting the soil of its elements of fertility. We endeavored to demonstrate to him the impossibility of proving anything of the kind by analysis. "Well," he replied, "even if what you say is true, I thought, and still think, that the analyses I have quoted afforded a good text from which to preach a sermon on the miserable system of cultivation too generally practiced. Whether true or not, if the publication of such statements as those made by Dr. —— will induce our farmers to cultivate their land better, much good will be done."

Such views as these, appear to be entertained by many of our most popular agricultural writers. The orators at our State and County Fairs, the worthy Secretaries and Presidents of our Agricultural Societies, learned Professors, and dignified Presidents of our prospective Agricultural Colleges, one and all, seem to deem it necessary, in urging the advantages of an improved system of cultivation, to prove that under the present mode of tillage our soils are rapidly becoming exhausted of their elements of fertility. From Maine to Minnesota, from Canada to California, there is one continuous whine on this subject, and the last mail brings back a faint echo from the other side of the Atlantic. The *Mark Lane Express*, the ablest and most influential agricultural journal in England, in a review of the "*Fourth Annual Report of the Secretary of the Massachusetts Board of Agriculture*," alludes to this subject as follows:

"It has been said that a sterile soil is usually better cultivated than a fertile one; and that the principal reason why England exhibits features in farming almost equal to gardening, is that the soil, generally speaking, is so inferior that it awakens all the energy of the cultivator to raise a remunerating produce. This rule, however, does not hold good in New England or Massachusetts. There the soil is certainly inferior in quality to most of the States; notwithstanding which, the scourging system has been at work there to such a degree as to extort the following statement from a speaker at the Massachusetts Ag. Society's meeting: 'One thing is certain, that under the influence of *practical farming*, as it is called, the land of New England has notoriously deteriorated to such an extent, that it is estimated that at least a thousand millions of dollars (£200,000,000 sterling) would be required to repair the effects of a wasteful and exhausting system of cultivation.'

"Again, in the report of the committee on farms of the Essex (N. E.) Agricultural Society, it is stated that notwithstanding premiums are offered of fifty dollars for the best-managed farms, only two competitors presented themselves, and one of these afterwards withdrew. Similar admissions are made by the committees for other societies. But a more striking proof of the hostility of the farmers generally to improvements, is the fact, that when a comparatively small sum was required to conduct a farm for experimental objects by the State, it was refused by the House of Representatives, although the tax individually would have been of the most homœopathic amount.

"Now, when we consider that New England* is the foremost State of the Union in the encouragement of agriculture by the authorities; and that, notwithstanding this, the produce of wheat has decreased in forty years 50 per cent. per acre, oats 40 per cent., Indian corn 70 per cent., sheep 70 per cent., &c., &c.; we may conclude that in the other States the same process of deterioration is going on; and that the accession of new land to the cultivation of cereal crops does not more than compensate for the falling off of production on the old land, and the increased consumption consequent on the increase of the population. We know from universal admission that in the State of Virginia the drastic character of the tobacco cultivation, as conducted there, has reduced that fertile soil to such hopeless sterility that a large portion of it is no longer cultivated. * * * It is also admitted that not only in all the old States, but even in those new ones that have been cultivated the past twenty years, the same process has produced the same effect; and after a few years the yield of corn, wheat, oats, &c., falls off; no manure, generally

* We suppose our contemporary means Massachusetts.

speaking, being applied to make good the waste of materials."

What is termed the "scourging system," is taking from the land all the crops which shallow plowing and imperfect tillage will enable it to produce without the aid of manure. And it is said that "at least a thousand million of dollars ($1,000,000,000) would be required to repair the effects of this wasteful and exhausting system of cultivation." The estimate is based on the *commercial* value of the potash, soda, lime, magnesia, sulphuric acid, phosphoric acid, chlorine, and ammonia, which the crops and animals sold off the farm have abstracted from the soil. Now, the amount of these substances contained in an acre of government land, which sells for $1.25, would be worth, *according to such an estimate*, at least $2,000; and it is just as absurd to say that the soil of Massachusetts has been impoverished to the tune of a thousand millions of dollars, as it would be to say that each acre was originally worth $2,000.

If shallow plowing and imperfect tillage—if "a wasteful and exhausting system of cultivation"—have removed a thousand millions of dollars worth of the elements of crops from the soil of Massachusetts, deeper plowing and better tillage, by increasing the yield of produce, would have removed a much greater quantity. By underdraining, by thorough tillage, by a judicious rotation, by the use of plaster, and by plowing in clover, many of our best farmers have greatly increased the productiveness of their land—they are enabled to sell double the amount of produce which the land in its undrained and imperfectly tilled condition would have produced. They remove from the soil double the quantity of the elements of plants; they impoverish the soil with two-fold rapidity!

So far, therefore, from the views advocated by these writers serving to stimulate farmers to an improved system of cultivation, fully carried out they would rather induce one who has any regard for future generations to let his land lie in its present undrained and untilled condition; for every crop he removes, according to these views, robs the soil of a given quantum of fertility, and the greater the crops—the better he farms—the sooner will his soil be impoverished!

To suppose that all the elements of plants which have been removed from the State of Massachusetts must be returned to the soil before it will be restored to its original fertility, is ridiculous. It might easily be demonstrated that many farms contain a sufficient quantity of the elements of plants to last, under ordinary cultivation, for two thousand years; and yet one of these farms may be so negligently cultivated for a few years that it will cease to produce profitable crops. Now such land is not "exhausted." As we have shown, it still contains more plant-food than it would if it had been better cultivated, and larger crops produced. The small quantity of *available* plant-food has been removed by "this scourging and exhausting system of cultivation," but the vast fund of inert plant-food still lies untouched in the soil. Let this so-called "exhausted" farm pass into the hands of an energetic and intelligent cultivator, and he will in a few years make it more productive than it had ever been before—and this without introducing one atom of foreign plant-food upon the farm. This statement is strictly in accordance with sound scientific principles, but it does not rest on them alone. This very thing *has been done* by hundreds of our readers. There are few towns in any of the older settled States that can not furnish an example.

The first flush of fertility of much of the land in the older settled States may have been removed; but the soil is not "exhausted." A better system of cultivation may be necessary to obtain as good crops as formerly, and we greatly err if the intelligent land-owners of the United States and Canada are incapable of adapting themselves to circumstances. Instead of censuring them, as many of our popular writers do, for availing themselves of the fertilizing elements accumulated in their new land, we think it was wisest and best to convert these elements into such crops as would yield the greatest profit. The country was new, the farmers poor, and the land rich and cheap. Houses and barns had to be built, the land fenced, and railroads and canals constructed. The sturdy, enterprising pioneer, with little capital but his axe and his stalwart arm, clears the primeval forest. He tickles the rich earth with a hoe, and it laughs with a harvest. Thriving towns, smiling villages, and prosperous cities, spring up as if by magic. Railroads are built, canals dug, and lakes and rivers are covered with floating palaces. Before the stumps of the original forest are decayed, churches, school houses, academies, and colleges, testify of an enlightened civilization and a material prosperity unparalleled in the history of the world. Shall superficial thinkers, quibbling writers, and self-satisfied lecturers, be allowed to snarl and carp at men who have accomplished such glorious results? What if they have reduced somewhat the fertility of the soil, and made more thorough tillage necessary. They dug wealth from the soil, but they did not squander it. It has been expended in laying the foundation of a mighty empire.

We are in favor of taxing the soil to its utmost capacity, instead of letting the elements of fertility lie dormant and unproductive. Nature had manured our land, and the farmers availed themselves of the opportunity of obtaining good crops at small

expense, and were thus enabled to sell at low prices. It was wise in them to do so. If, now, the land needs manure, they must supply it. The *soil* is not exhausted—the *manure* may be.

This is the great problem which the farmers of the older States have to solve—how they can enrich their land so as to compete with the naturally manured new land of the West. They need all the light which modern science can afford; all their skill and experience will be taxed to the utmost; but they will prove equal to the occasion. They have done well; they deserve honor, not censure; they will do still better in the future.

## JOHN JOHNSTON'S WHEAT CROP—SALT AS A MANURE.

Successful agriculture is the main foundation of national prosperity. Anything which injures the farmer, injures all other classes. "Will the *midge* continue so destructive as to force farmers to abandon wheat culture?" is now the anxious question asked by the miller, the merchant, the mechanic, and the manufacturer—bankers, brokers, forwarders—"middle men" of every class—all feel that their prosperity depends on the ability of the farmer to meet this alarming adversary. Many intelligent persons advocate the temporary cessation of wheat raising, in the hope that the midge may pass over. But the experience of farmers in the Eastern States indicates that this will be useless—the midge is now as injurious there as it was twenty-five years ago. The midge can propagate itself in other plants. We have found it in barley and in couch grass. If we give up wheat culture now, we can hardly hope to renew it at a future day. No; we must meet "the yellow villain" now, or acknowledge ourselves vanquished. We have seen fields of wheat, the present season, cut for fodder; and it seems almost fool-hardy to continue to sow wheat under such circumstances. But we *must not—will not*—succumb.

The midge is no new thing; it is probably as old as wheat itself. Nearly thirty years ago it was as destructive in Scotland as it has ever been in the worst affected districts of this country. It prevails to a greater or less extent in all parts of Great Britain. In the *London Gardener's Chronicle* for 1841, Prof. Henslow says: "The wheat midge, (*Cecidomyia tritici*,) millions and millions of which infest every wheat field, is hardly known by farmers to do them any wrong; and yet on an average it destroys one-twentieth of a crop, and may possibly destroy a great deal more."

Previous to the introduction of underdraining, high manuring, and good cultivation, in England, mildew, rust, and smut, were much more prevalent, and the midge and other insects more numerous and injurious, than at present. Many English farmers still living have sold wheat for *seven dollars* per bushel; and one man we are acquainted with declared, when wheat fell to $3 per bushel, that it was "cheap enough to feed the pigs;" and yet this man to-day, owing to an improved system of culture, realizes more profit from his farm than when he obtained $7 per bushel for wheat. English farmers have been *forced* into a better system of agriculture, and such will be the case in this country. At the present time, there is scarcely a plant grown by the farmer or gardener, that is exempt from the attacks of insects. As a general rule, it will be found that the means necessary to escape these attacks will be such as promote the health, vigor, and productiveness, of the plants. This we believe will prove true in regard to the wheat midge. It is a *Nemesis* sent to scourge us into good culture.

But will good culture enable us to escape the ravages of the wheat midge? It may not enable us to escape entirely, but it will certainly greatly mitigate its injuries. It will enable us to raise good wheat, at a fair profit. Those farmers who adopt the best system of culture are even now affected the least; but they suffer more than they would, from the fact that the propagation of the midge is encouraged by the bad cultivation of those around them. Probably there is no farmer in Western New York who has his land in a higher state of cultivation than John Johnston, of Seneca county. He has thoroughly underdrained every part of his farm. He grows great crops of clover, and feeds it out in his barn-yards to sheep and cattle.—Though he has raised some years as much as 3,000 bushels of corn, he has never sold a bushel off the farm. He has for many years purchased large quantities of oil-cake, which, together with the corn, clover, straw, etc., are fed to cattle and sheep, thus making a large quantity of rich manure. The result is that he has always had good crops of wheat, and has made himself rich by farming. True, he has suffered somewhat from the midge, but nothing in comparison to his neighbors. Two years ago, one field of 25 acres produced 841¼ bushels of good *Soules* wheat, or over 33¾ bushels per acre. The same field is in wheat (*Soules*) again the present season, and we had the pleasure of examining it the second week in July.

To grow wheat every other year, is running the land pretty hard, and the crop on a portion of the field the present season indicates that the unaided soil will not bear such heavy cropping. Eleven acres were sown without any manure, and fourteen acres were dressed with one barrel of salt (280 lbs.) per acre. Otherwise, the conditions were precisely the same,—the same previous crops and tillage, the

same seed, and sown at the same time. The line of demarkation between the salted and the unsalted portions is very distinct throughout the whole length of the field. On the eleven acres without salt the crop is an unusually good one for this season; there is perhaps straw enough for 30 bushels per acre, but it is considerably affected by the midge, and will not yield probably more than 20 bushels per acre. On the fourteen acres where salt was sown, the straw is heavier, stiffer, and brighter, and the heads larger. It is, too, some *four or five days earlier*, and is nearly free from midge. It ripened too soon for them. The insects attacked it, and we found a few of the larva under the chaff on the *outside of the grain*, but they have done very little damage. We agree with Mr. JOHNSTON in estimating the yield at full 30 bushels per acre,—probably it will be as great as it was on the same land two years ago, or nearly *thirty-four bushels per acre.*

Mr. JOHNSTON has used salt occasionally on his wheat for twenty years, and always found it to promote the growth and *early maturity* of the crop;—he thinks the salted wheat is four or five days earlier. He sows the salt at the time of seeding. This year he intends to sow 400 lbs. per acre. He thinks it would be better to sow it on the fallows in the early part of summer;—the more intimately it can be mixed with the soil, the better.

This fact in regard to the beneficial effect of salt, is an exceedingly interesting one, both in a practical and scientific point of view. Salt contains two elements which enter into the composition of all our cultivated plants; but we think its action, in this instance, at least, is not to be ascribed to its supplying these elements; they are seldom deficient in soils. If we adopt Prof. WAY'S hypothesis in regard to the form in which wheat and other ceralia take up the silica required to stiffen their straw—viz., as a double silicate of alumina and ammonia—we have at once an explanation of the fact; for this double silicate is much more soluble in water containing salt than in pure rain water. In other words, a dressing of salt would be equivalent to a dressing of ammonia, which is known to have such a beneficial effect on wheat, not only promoting its growth, but increasing its early maturity.

If this hypothesis is correct—and we state it merely as an hypothesis—salt will do little if any good on poor soil; and even on rich land its effect will be merely temporary, unless the soil is furnished with ammonia, in manure, or by plowing in clover, etc.

To grow wheat, the soil must be naturally dry, or thoroughly underdrained; it must be rich, and especially rich in ammonia, *without an excess of carbonaceous matter*, as is apt to be the case when clover is plowed in for a number of years. Better make it into hay and consume it by sheep or cattle, and return the manure to the land. By judiciously enriching the land, and by sowing the earliest varieties, we believe that wheat can still be raised in spite of the midge. Mr. JOHNSTON'S experience confirms this view. It is consistent alike with sound theory and practical experience.

## A DAY IN WHEATLAND.

BY the kindness of JOHN DORR, Esq., of Scottsville, we recently spent a very pleasant day among the farmers of Wheatland and Caledonia, in this county. They were very busy; some cutting wheat, others barley, and many still in the midst of haying. Comparatively little wheat was sown last fall, on account of the midge. Barley has taken the place of wheat to a considerable extent. A large breadth of land was sown, and the crop is very good. Here is a splendid crop, belonging to the Hon. JOHN MCVEAN. The land was in corn last year, and the barley sown and *gang-plowed* in. This was all the cultivation it received. Only one bushel of seed was sown per acre. Here is a good field of Mediterranean wheat, belonging to Mr. HENRY HARMON. The midge has not hurt it. What we want is, a variety of white wheat equally early. Here comes a farmer who has usually sown from forty to sixty acres of wheat every year. This year he has but two acres. "And there," says he, "I missed it." His two acres produced a splendid crop. This is the way—sow only a few acres of the best land, and manure and cultivate highly. Here are the magnificent farms of ELISHA and Gen. HARMON, once so celebrated for their wheat-growing qualities. They appear to be principally laid down with clover, and stocked with fine Merino sheep. What wheat there is looks well, and the crops of barley, oats and corn are excellent.

DONALD MCNAUGHTON still continues to raise wheat, with very fair success. He has this year one hundred and ten acres, that he thinks will average twenty bushels per acre. "To have wheat early," says he, "you must plow early, and make the land warm by exposure to the sun." In other words, a good summer fallow decomposes the organic and disintegrates the inorganic matter of the soil, and renders the food of plants available. He has used salt and lime, and also salt and ashes, with good effect. The wheat is earlier and better on land so manured.

Mr. OLIVER LEE, of Mumford, has a factory for the manufacture of woolen goods. On our alluding to the high fertilizing value of the woolen waste, he said it was so full of weeds and foul seeds that it could not be used as a manure. This

is to us a new fact. *Theoretically*, it is nearly equal to Peruvian guano as a manure—except that it is slow to decompose. We should be disposed to use it, in spite of the weeds. Could it not be composted, and the weeds started and destroyed before applying it to the soil?

These are curious looking geese! "The breed originated in this way. A wild goose was caught, and after some trouble mated with a tame gander. They are said to be hardier and of better flavor than the common goose."

Corn is excellent, although much of it had to be planted twice. If, as has been said, "the corn crop is the test of good farming," the farmers of Wheatland must be accorded a high position. The rows are very straight, the cultivator has been freely used, the crop is luxuriant, and scarcely a weed is to be seen.

Here is a large field of white beans. Their cultivation is not general, but is extending since the failure of the wheat crop. "I believe you think the growth of beans serves to enrich the land?" When consumed on the farm, and the manure returned to the land, they undouptedly do so; but this is seldom practiced. Beans contain nearly three times as much nitrogen as wheat, and afford very rich manure. But if the crop is sold, the idea that beans are an enriching crop may not be correct,—although, from the fact that the straw is rich in nitrogen, it may be so. At all events, from being sown in drills they may be regarded somewhat as a fallow crop, affording an opportunity to clean the land. Beans in England are considered an enriching crop, but they are generally consumed on the farm by horses and sheep. They are a different variety from the white bean, although the same in chemical composition, and their growth has probably the same effect on the soil.

Here is a farmer that has planted out quite an extensive orchard of dwarf pears. *He has just mowed a fine crop of timothy from his orchard.* The trees look better than could be expected from such treatment, but the owner will soon join the ranks of those who so pertinaciously assert that dwarf pears are a failure! No one expects to grow a crop of corn and a crop of hay from the same land, and any one who expects to grow dwarf pears and hay together will assuredly be disappointed. They need as good cultivation as corn or potatoes.

"They will not succeed even with good cultivation," says a neighbor of the farmer alluded to. "I have two trees in my garden that have received the best of treatment, but they are of no account. Come and see them for yourself."

"They have not the habit of healthy dwarf pear trees. Are you sure that they are on quince stocks?"

"I grafted them with these hands, and saw that they were quince stocks with these eyes."

"Sir, I believe it on that ground alone,—I could not had I seen them with my own. But stay; were they the common *Orange* quince?"

"Certainly."

"That accounts for it. It is well known that pears will not flourish grafted on the common quince. The *Angers* and *Fontenay* are the only varieties fit for the purpose, and none others are used by the nurserymen. The wood of the common quince is of too firm a texture to be used for this purpose. No wonder that your trees do not succeed."

We trust our friend will plant out a few properly worked dwarf pear trees this fall, and the next time we have the pleasure of spending a day in Wheatland, he will no longer consider dwarf pears a humbug.

## SUGGESTED ITEMS.—No. 23.

THE finest of weather for haying and other farm labors is ours about these days. Let us "thank GOD, and take courage," though prices are depressed and the midge as abundant as ever.

"*A Long Island Prize Farm*" seems situated just right for the purposes to which it is devoted; but with such soil and facilities for manure, labor, and market, who could not make money! One man could not—the man without enterprise—the slack-handed, make-do farmer. The "best chance in the world" slips away from him; his labors are ordered by chance, not by *calculation*.

"*Permanent Grass Land*" must get more attention from our farmers. We reiterate the assertion, that *we plow too much*—and the true maxim is, not to "cultivate one acre more," but to enrich one acre more, so that it will yield the crop given by two acres heretofore. Grow more grass, keep more stock, plow less but more thoroughly. I join with "S. W." and "B. F." in calling for increased attention to "*Grass Culture*."

"*Artificial Manure for Corn*" is well applied by Mr. TAYLOR. We have often thought that some method should be devised for *feeding* corn and other hoed crops, at the time when they become hungry; that it would be most economical in manure, and largely increase the growth of the crops. Still, increased labor is required, and farmers are slow to adopt methods requiring more work—they think their hands are full now as need be.

"*The Advantages of Mowing Machines*" gets but little further illustration from the articles given this month. My opinion is that they don't pay for the small farmer—but that the large farmer can not afford to do without them—and that no man who has them can afford to neglect putting his land in order for their use.

"*Churning Milk* vs. *Churning Cream*" is a new question with most small dairymen; but for butter makers, churning the milk will undoubtedly prove most profitable in warm weather. The milk, as Mr. SMITH says, will get sour before the cream has all risen, and in very warm weather it is impossible

to separate the two as perfectly as desirable. But we want power churns in this case.

"*The Construction of Barn-Yards*" on the plan of "J. A.," would not prove the best practically, in my opinion. Unless the hollow was very large, it would at some seasons fill to running over, and at all would be "a slough of despond" to those who were compelled to cross it. We will not attempt, at present, to offer a better plan.

"*Stacking and feeding out Straw*" in a proper manner is too often neglected, though labor expended in this direction would be as profitable as any which can be done by the farmer. We prefer building the straw stack in the barn-yard, and using it freely for littering yard, sheds, and stables, giving the stock a fair chance to consume all they will, as it is taken from the stack for these purposes.

"*The New Half-Volume,*" commencing in July, ought to have several thousand new subscribers. "Only three cents" for a paper like the one before us is unparalleled cheapness, taking real value into consideration. B.

*Niagara Co., N. Y., July, 1858.*

## NOTES FOR THE MONTH.—BY S. W.

Long Island Wild Lands.—Having recently visited those lands which were advertised in the June No. of the *Farmer*, I can now bear testimony with Professor Nash, (who spent several days in examining this large tract of the great central plateau of Long Island,) that every word set forth in Dr. Peck's minute description of those lands, as advertised by him, is strictly true.

At Deer Park station, on the Long Island railroad, thirty-seven miles from New York, is the farm of the late Mr. Wilson, carved out of these wild wood lands within the last four years. Here was the best field of wheat I had seen, and fifty acres of the handsomest timothy and clover; here also were the finest fruit trees, gardens, and Indian corn, growing on the very spot where a late historian of Long Island set down the soil as a "barren sand, approaching fluidity." As Professor Nash truly said before the Farmers' Club, these plains are not, as has been asserted, "barren sand and gravel," but a "generous loam, finely adapted to garden culture, and capable of producing various crops most profitable to the farmer." If it is asked why these lands have been so long uncultivated, it may in the first place be said, that until lately there was no road through them, and common report had set them down as barren; and when the railroad reached them, the Rip Van Winkles, instead of availing themselves of its advantages, made war upon it as an intruder on their hereditary, time-honored right to transport their truck to New York by the sail craft of the bay, or Long Island Sound. Again, the question may be answered, Yankee fashion, by asking another: why is it that these fogy farmers have never yet, in a single instance, submitted to the modern improvement in manuring their farms, by plowing in blooming clover for a manuring crop? I now venture to assert that if the same exhausting process of tillage practiced here, had been applied to a soil less grateful, and in a climate more arid than that of this sea-girt island, such soil would ere this have been reduced to a barren waste, that no verdure quickened, and in which no plant could take root.

I also noticed at all the other recent clearings on this bushy plain, the same beautiful fields of clover, gardens, and corn-fields. At North Islip station, forty-three miles from New York, the soil in the bushes, after removing the vegetable mould, was three and a half feet deep,—a yellow sandy loam, apparently rich in plant food; this was underlaid by that light colored sand and gravel that characterizes the subsoil of the Island, forming that universal underdrain which saves the enormous expense of tile draining, so indispensable in western New York. Yet no region of the State is better watered by springs and lasting streams, and the well water never fails. A short distance from this station is a young peach orchard of eight acres, encircled by the scrub plain; such healthy trees, filled with perfect fruit, would be called a phenomenon, at this time of stung and diseased peach trees, in western New York.

We now went by stage from this station to Islip village, at the bay four miles distant, by a good smooth road through the bushes, descending twenty feet to the mile; here we found a spacious, costly hotel, and many boarding-houses, and genteel taverns, without a bar; fine houses, elegant gardens, and the appearance of both wealth and good taste. Here, for the first time since this hot term, I slept comfortably, under the influence of that cooling sea breeze which is not felt at New York and the western part of this Island. Here I feasted on quahaug clams, roasted in the shell as of old, and on the savory horse mackerel, fresh from the bay. The soil here is coarser than that in the interior, but the humid sea air gives a peculiar fulness and brilliancy to the white clover blossoms, unseen on the dry calcareous soils at the west. Land here cannot be bought for much less than $200 the acre, while a better soil, on the uncleared plains four miles distant, is now offered at $20 the acre. It needs not therefore the spirit of prophecy, to see that this whole bushy region, of many thousand acres, can not much longer remain unsettled, if it only escapes the forestalling land speculator; one of the genus, I was told, already holds several hundred acres, which he keeps out of the market, declining to sell it for the present at any price.

All the way from Brooklyn to Islip, I did not see either a barren, worn out field, or one that needed the expense of draining; even the time-slandered Hempsted plains were covered with white clover, and bovine herds far and near in the distance. At Hickville station a car was loaded with cans of milk for New York market,—an entire new enterprise, which threatens to extend and rival the Orange county article, which of late is said to taste of naughty slops.

There is a homogenousness in the soils of Long Island, that must be interesting to the Hugh Millers of the land. At Green Point, opposite New York, there are some large quartz and granite boulders, apparently strangers, but the same yellow loam predominates; and in proof of its organic wealth, I saw white clover growing where the surface soil had been excavated and taken off to the depth of several feet.

On returning west, I could not resist the conviction that a kind superintending providence had in the beginning made Long Island what it is, with its moist, grass favoring atmosphere, almost without a

swamp, or a waste, inarable, or rocky acre, both well underdrained and well watered, and with a quick, easy, grateful and generous soil, to fit it to become in these last days the great fruit and vegetable garden of these great and growing cities; and while its soil supplies them with vegetable luxuries, pigs and poultry, milk and honey, it is also to receive from the great Babylon those organic wastings now festering there in every street, yard and corner, in spite of all present scavenger efforts, to the deterioration of all adult health, and daily nipping infant life in the bud and blossom.

Creek Side, Buffalo — Fruits and Vegetables.—This creek intervale overflows in high freshets about seventy rods from the creek, but such is the rare formation of the subsoil for this distance, that the water from the tiles above sinks here from the main tile drain, without passing through it to its mouth at the creek. Here, with creek water supplied by horse power, is a cold grapery 670 feet long, containing 600 vines, with 175 already in bearing. One year ago not a vine had been planted; but by great attention, judicious cutting in, ventilating, watering, &c., many of the vines have now attained three-fourths of an inch in thickness. It is supposed that the yield of grapes this season, only about fifteen months after the vines were set out, connot be less than three hundred pounds.—Here are 1500 pear trees, principally dwarfs, two years planted; the frost about the 10th of May destroyed the blossoms of the few earlier planted, so that very few pears have grown; thus far they have no enemies but the leaf slug, which is readily destroyed by a dusting of lime or ashes; the trees are mulched with tan bark and well cut in, which adds to the root and trunk both. Here also is a new orchard of one and a quarter acres of the Lawton blackberry, half an acre of raspberries, one thousand gooseberry bushes, one thousand bushes of the large white and red cherry currants; two acres of strawberries, from which $200 worth has been sold this season. But although cold graperies promise well here, the Isabella grape complains of the climate, and does not flourish here as it does in the region of the Cayuga and Seneca Lake; hence, for outside culture, the small but very early *Delaware*, the *Rebecca* and *Concord*, are now substituted here, and they grow rapidly on this strong alluvial soil. The season for strawberries, late here, was cut short by the dry, hot weather.

Pie plant and asparagus are here also in large breadth, and have yielded well this season. Owing to the wet, backward spring, which is ten days later here than at many localities east, kitchen vegetables are late; but here are four acres of Mexican potatoes, and the same number in pop corn, that promise well; in fact, the season is rarely if ever too hot or dry for corn here, as the cool lake influence is ever present. There is a large breadth of glass here for hot-beds, from which cucumbers have been sold since 10th May. Tomato plants and melons are all brought forward with great pains under glass; but it would be bootless to attempt to get a remunerating crop, by planting early in the open air. Celery flourishes here without an enemy; but a small white maggot, resembling a cheese skipper, has this season nearly destroyed the early cabbages, by eating them off under the surface of the ground; it is supposed to be brought in by the animal manure. Next year cabbages will be grown on old soil, and treated for the first time with superphosphate of lime. Turnips rarely amount to any thing on these alluvial bottoms.

*Creek Side, July* 10, 1858. S. W

Postscript.—Grass is the great staple of this region, as it ought to be, for the hard blue clay soon comes to a plowed surface, making underdrains necessary. But such weeds as grow here the tropics cannot rival; and to cap all, there is a running vine, with the flowers of a morning glory, that creeps over all and crowns all. The wild parsnep, artichoke, elder, &c., &c., grow like Jonah's gourd in the night; and what is strange, newly broken up old sod is free from these weeds the first year. S. W.

## FEEDING OUT CORN-STALKS.

"What is the best time, place, and way, of feeding corn-stalks to farm stock," is a question upon which we have received some information,—a prize essay having been published in the July No. thereon. We have a few notions of our own, which you may if you please lay before your readers.

Many farmers, now-a-days, raise corn-stalks enough, if they were properly cured and saved, and then fed out without waste, to winter all their cattle, or at least to make their main food, save what meal or roots may be supplied. And milch cows give more and better milk on corn fodder, than on the common run of hay,—at least in our experience.

As to the *time, place*, and *way*, briefly. Stalks can be fed out with perfect economy upon hard frozen ground—there is ever loss and waste in warm or wet weather, however well the yard may be littered. But if one has to feed them, whether the ground is frozen or not, the next best place is a rack or manger to which the cattle are fastened by stanchions, so that they cannot step back and drop under their feet every stalk they take hold of, before it is one quarter eaten. They should be fed either here or in the yard—the refuse stalks being removed from the manger each day after feeding. It is the poorest policy in the world, to scatter corn-stalks over the fields and lands, for consumption by cattle, and when fed in the yard it will pay to see that they are well distributed through the manure.

The chief advantage of *cutting* corn-stalks is, that a very little more is consumed, and there are no long stalks to interfere with getting out manure. This might pay some farmers, but it would not remunerate us for the extra labor.

Sheep will thrive well on corn fodder a portion of the time, but they do not eat them as cleanly as cattle, and hence we would not give them to sheep alone. We have sometimes allowed a small flock of sheep to have the run of the barn-yard in freezing weather, while corn-stalks were being fed to cattle—not regularly, but occasionally—that they might have the change of food with which they are so well suited at all seasons. H.

Cement for Stopping Leaks.—A composition of four pounds of rosin, one pint of linseed oil, and one ounce of red lead, applied hot with a brush, will stop leaks in roofs, water casks, etc.—*Ex.*

### FERMENTED MANURE—COMPOSTS.

Editors Farmer:—In the June number of your paper, Mr. Johnston replies to an assertion of Dr. Lee's, that manure is injured by turning and stirring as in making composts, that such is not the fact. Indeed, Mr. J. carries the idea that manure can hardly be too rotten for economical application to the soil. I can not, from my own experience, say that he is wrong, but will merely call attention to a *good* authority on the question at issue. Prof. Stockhardt, in his *Chemical Field Lectures*, says: "The farmer will always adopt the safest course, who suffers his manure not to putrefy, but merely to *commence* this process upon the muck heap. According to the opinion of practical men, this period has set in when the straw assumes a somewhat brownish color, and has become so tender as to be torn readily by the fork in loading. Theory may be represented as agreeing with this decision."—You have taught us to place considerable confidence in the teaching of this German agricultural chemist, and his reasoning on the subject is forcible and seemingly conclusive.

But what we would speak of more particularly, regards the most economical method of making composts. How shall we manage, with *the least labor*, (an important consideration in this country,) to get the requisite fineness and fermentation to our long manure? There are several methods employed in this and other countries. One method, practiced in the turnip-growing sections of England, is, to place the contents of the cattle yards in the corners of the fields to be planted, in square piles, about six feet in height. The contents are carried out at one, or at most, two different times during the winter, and no pressure is allowed on the piles, except the weight of a man to spread the materials thinly and evenly over the heap. In this condition fermentation reduces the pile into a saponaceous heap, readily divided by forks, and from which in May the heat of fermentation has nearly or quite vanished. Much bulk is lost by this mode of preparation, but the manure is in fine state for applying to crops.

Another method, which prepares dung for use with less fermentation and loss of bulk, is to draw out the manure at any time during the winter or early spring, placing it in heaps sloping at each end, driving the carts over it, and consolidating the mass so that no fermentation takes place. Care is taken to mix the whole evenly as regards quality and moisture, and about ten days before the dung is required for use, the heap is turned over with forks, laid loosely together, the lumps well broken, and the dry outside thrown into the centre. A very active decomposition immediately commences, which is still going on while the manure is being applied to the land, and is plowed in as rapidly as possible. It is claimed for this mode, by the English farmers who practice it, that it produces equal if not superior results to that first mentioned; it affords larger bulk and more convenience in forming the heap at different times through the winter season.

Let us submit a query to the reader. If the long straw, stalks, and litter, usually contained in yard manure, had first been passed through a cutting machine, would not the manure be fit for immediate application to the crops, as taken in spring from the yard? Many practical farmers will reply in the affirmative; but we doubt whether a small quantity would produce all that effect which the same amount would when fermenting, as used in the second method above described.

From our experience with compost heaps, the opinion has been forced upon us, that there is little danger of loss from rain, but rather from the want of it. If the heap is too dry, what little heat may be induced by fermentation will render it still dryer, and it will either burn or dry up in clods and lumps. If rightly wet, it ferments slowly and evenly, and upon turning, falls to pieces, which is just the state desired for thorough incorporation with the soil. If the farmer heaps his dung in the yard, it may be better to make it in small heaps than large ones, the latter have not succeeded with us as well as the former.

If Mr. Johnston will favor your readers with a further explanation of his method of forming compost heaps, he will confer a favor on many, and on none more than on A YOUNG FARMER.

*Niagara Co., N. Y., July* 15, 1858.

### BEAN STRAW AS FEED FOR SHEEP.

Editors Genesee Farmer:—I have never kept but few sheep—from fifteen to thirty—but have always endeavored to give them the best care within my power, and have always raised more or less beans. Bean straw is without doubt relished by sheep when in good condition, but I have always been more or less troubled to get the straw cured in good order; and unless it is in good order, I have never considered it as good feed, as my sheep always leave it for hay, and even for oat straw and corn-stalks. But again, when the beans have been harvested early and in dry weather, and the straw cured in good order, the sheep will leave all other feed for it. But whether bean straw would be profitable for constant feeding I am unable to tell; I am in favor of changing the food of all animals, and sheep in particular, as they always do better when receiving different kinds of food. As far as my own experience has taught, and the information I have gained from inquiries of those who make the raising of sheep an important part of the business of the farm, bean straw is valuable as feed for sheep, when fed in connection with other kinds of food, as hay, roots, grain, and other kinds of straw. Beans are readily eaten by sheep, and are valuable as food, but I am of opinion they would prove an unprofitable and possibly an injurious article for steady feeding.

While I am upon the subject, let me urge the necessity of feeding a few roots, as carrots, turnips, ruta bagas or beets, to sheep. I have always found them of great benefit, especially to ewes with lambs. No kind of feed is relished by sheep in the winter like roots; and in connection with a little grain, hay and bean straw, with occasional salting and free access to water, there will be no doubt but that sheep will do well. They should have convenient sheds to protect them from storms in winter, as it is almost impossible to keep an animal in good condition when exposed to the cold and storms of our winters. B.

Many farmers are too sparing of seed wheat. Thin seeding has a tendency to produce late crops, and increases the danger of injury from the midge.

## HOW FARMERS LOSE MONEY.

Farming without profit is a money-losing business. Farming neglectful of practices known to ensure larger crops, is a money-wasting business. Farming with mistaken ideas of economy, saves cents to throw away dimes—spares a few days' work and gets but half what the soil would give with better treatment. Let us give a few illustrations.

To begin with a minor instance, farmers lose money by neglecting to study the

ADAPTATION OF CROPS TO SOILS.

It is well known that almost every crop and product succeeds best in some one kind of soil, and that these preferences vary as widely as soils vary. One kind of soil is a corn soil, another a wheat soil, another suits rye, and another cat-tail flags and bulrushes. Let us try, then, to so plan our operations as to give (as far as a judicious rotation will allow and our farms admit) each crop the soil which suits it. And there is room here for a careful study of the affinities of soils and products;—we commend the subject to the agricultural writing public.

Farmers lose money by a neglect of the maxim that all

POOR SOILS MUST BE MANURED

before they can become productive of valuable crops. To grow, a plant must receive suitable food—it can be starved as readily as man or beast. And yet, how much of the unprofitable farming to be seen, results from attempting to grow crops on worn or impoverished soils *without manure*. The corn crop, for instance, is a comparative failure on all but good soils, from want of food to thrive upon,—from lack of abundant and ready prepared nutriment to hasten its growth so that it may reach maturity in season. An acre of land, of suitable soil, rich, deeply tilled, planted in good season, and thoroughly and cleanly cultivated, will produce more corn than five acres, poor, skim-tilled, late-planted, and half-cultivated, and at perhaps one-half the expense of the latter.

The question of deep or skim-plowing needs further illustration. An acknowledged requisite of large productiveness is

A DEEP AND MELLOW SOIL.

A large hill of corn, a thrifty growth of wheat, grass, oats, or barley, must have roots and rootlets equally large and thrifty; and such only grow in a deep, mellow soil. With plenty of room and food for the roots, the whole plant will correspond; with a shallow or cloddy soil, the roots are only adequate to a small growth above ground—they can neither find nor carry up the nourishment requisite to a large product. It may be said that some soils are already too light and mellow; but such are rare. We have had no experience in their culture, and doubt their being very attractive to agricultural labor.

Farmers, again, lose money by

UNSEASONABLE SEEDING—

by sowing and planting when only a remarkable season can produce a favorable result. Spring grains are sown when in the usual course of nature the summer drouth must injure them seriously; corn is planted when frost is most likely to find it "in the milk;" wheat is gotten in too late to withstand the winter and just in time for the midge—the farmer taking a risk no insurance company would venture upon without the highest premium.

CLEAN CULTURE

is an acknowledged necessity of profitable farming. Is it a matter of small importance to a growing plant whether it has the field to itself, or whether weeds surround it and rob it of a portion of the nourishment supplied by the soil? Experience teaches that it is not—observation will show us that we can not feed a vagabond with the bread which belongs to our faithful servants, unless they go hungry for the same.

Lastly, (for this time, at least,) farmers lose money by not heeding the injunction,

"DON'T ATTEMPT TOO MUCH,"

*i. e.*, more than they can carry out thoroughly and systematically. Don't let us attempt to grow cat-tail flags on good corn soil—to raise a "premium crop" of any kind on an exhausted soil without manure—to feed plants with brickbats and inert subsoil—to plant when we should be hoeing—or to raise grain and weeds at the same time, expecting both to flourish;—but attempt only what we can give due preparation, manure, time, and culture; and the number of ways (they seem almost innumerable) in which "farmers lose money" will be slightly less.

J. H. BIXBY.

*Royalton, Niagara Co., N. Y., 1858.*

## COST OF RAIL FENCES.

The expense of fencing a farm per acre has been variously estimated at from three to six dollars per acre, and one curious in statistics might readily calculate the total value of fencing in this country. Probably, at the lowest, it would amount to $500,000,000, with an annual expense for repairs of $50,000,000 more. The interest on capital invested in fences, and in woodland required for renewal, would swell the amount to about *one billion* of dollars—a pretty snug sum truly.

A rail fence put up on our little farm, a few years since, gave us a chance to figure cost as follows: The material was black ash rails, costing, delivered, (a very low rate,) $20 per thousand. About 12 rails to the rod are allowed for a seven-rail fence; so a thousand rails make 83.3 rods. One-half the boundary fence of the lot (about 166 by 28 rods, and containing 22 acres,) will require 2,350 rails, costing $47. Two cross fences, at least, are necessary. These will take 675 rails more, worth $13.50. So, for rails alone we must lay out over $60. The cost of laying the fence, with stakes and caps, will be at least six cents per rod; which brings up the cost of this rail fence to $75—about $3.41 per acre, the size of the fields averaging seven and a half acres.

Perhaps we have estimated staking and capping too low, as we have not the figures to refer to. We know that before they were added, there was an added expense of relaying the fence after very high winds, which would go some way toward providing them.

A YOUNG FARMER.

One of the best pieces of spring wheat in this vicinity last year was sown about the first of June. It was too late for the midge, and escaped entirely. Adjoining fields, sown early, were much injured.

## PLOW DEEPER.

Messrs. Editors: — There seems to exist quite a diversity of opinions in regard to the proper depth that land should be plowed. Many, and, in my opinion, too many, advocate shallow plowing. What is the use, say they, of plowing up the sand and clay, and burying the manure and the soil out of the reach of the plants? Let us reason together. What is the use of plowing at all? Is it not that we may pulverize the soil and bring it to such a state that the little roots and fibres of the plant may shoot out and gather up whatever they can find to nourish it? Is it not to incorporate the manure with the soil and make it of a uniform consistency as it regards quality, etc.? Now, the deeper you make the soil, the deeper will the roots penetrate, and the more nourishment will they be likely to find, and the less liable will they be to injuries from drouth. Plow deep. Don't fear burying the manure so deep that the roots will not find it; they can and will go as deep as you can by any plow ever made. It is possible you may not realize so good a crop the first year by burying the manure deeply. You will not lose. The next year you will have deeper soil, and in a short time your land will of course be nearly double the depth of soil. What makes bottom lands so much better than most uplands? Is it not the depth of soil? If you think you have not manure sufficient to make such a soil the first year, or must have the benefit immediately, act accordingly, but begin immediately. If you can plow but four inches this year, plow six the next, and increase annually till you get the soil deeper than you can get the point of your plow. I may appear somewhat dogmatical in my advice; but this is of small consequence provided I can dogmatize some into the practice who are now utterly opposed to it. What runs a farm out, as it is called? Is it not shoal plowing—a scratch over the soil, as if you were afraid of getting out of the reach of the sun and air? I verily believe this is the principal cause; and the remedy must be the reverse course of management.

*Sand Brook, N. J.* J. T. SERGEANT.

## ON THE CULTIVATION OF BEANS.

Editors Genesee Farmer: — I saw a communication from J. H. B., in the June No., on raising beans as a field crop. As I have raised beans for four years past, (the last year I planted seventeen acres,) I thought I would give you my experience in the matter, which, in some points, does not agree with J. H. B. In the first place, in regard to soil; a great many believe that to raise good beans you must have poor land. I have often heard the remark that such and such soil was so poor that it would not raise white beans; and I once heard the committee of a county agricultural society say it was of no use to offer a premium on beans, for if we manured our land it would spoil it for beans—if we wanted good beans we must have poor land. I have tried all kinds of soil, and have always raised the best beans on the richest land. One year I manured about an acre, and planted the rest without manure. The part I manured ripened earliest and evenest, and yielded about twice as much as the other. Last year I planted on a piece of green sward, plowed in the spring. The soil was a clay loam, and it had been tilled but a little. On one acre, where there was once a straw stack fed out, I had thirty-three and a half bushels, and they ripened the evenest of any in the lot. Any ground that will raise good corn will raise good beans—the richer the soil the better.

I plant about the first of June. Plow deep, drag it smooth, mark the rows three feet apart, and plant the hills about eighteen inches apart in the row; give from five to seven beans to the hill; cultivate and hoe enough to keep them clean. As soon as the pods have all turned yellow, pull them, and if the ground is very dry, and dry weather, throw them into heaps and let them get thoroughly dried; then draw them in. But if the weather should be wet, pull them and throw them into small heaps: then take a stake, cut off all the knots smooth, and stick it firmly in the ground; lay down two sticks, three or four inches in diameter, and place three or four pieces of board or stove wood across them, to make a platform to keep the beans off the ground; then take up the beans and place them around the stake. I make the stack about two and a half feet in diameter, and as high as I can reach. Top them out well. It makes no difference whether the pods are outside or inside. Beans stacked in this way will not wet in so but what they will dry out in half a day's good weather. By stacking them on sticks in that way, it gives a chance for the wind to circulate under them. Let them stand until they are thoroughly dry, then pull out the stake before pitching them on the wagon; draw them in the barn, mow them away, and let them remain until winter; then thresh them out.

The kind I raise I do not know any name for; they are a medium sized white bean, ripen in about three months from the time they are planted, and all ripen at once. C. INMAN.

*Ray, Macomb Co., Mich., June 15, 1858.*

## THIN SEEDING AND HOEING WHEAT.

I have just been counting my hand-hoed wheat, and the results so astonish me that I hardly dare credit my own count. The roots average a trifle over thirty stalks each, and the least number of grains to the head is seventy-two. At this rate, allowing four seeds to the hill and the hills two feet apart, we get from an acre of cultivated wheat over one hundred bushels, and this from less than six pounds of seed to the acre. Ordinary wheat weighs 898,560 grains to the bushel, and at the above rate — giving one root to each square foot of surface — we get from the acre 104,089,600 grains of wheat, which amounts to a trifle less than one hundred and sixteen bushels. These figures look large, but I believe are correct. At any rate, the *facts* of the growth are correct. Who will try an acre, four grains to the hill and the hills two feet apart each way, and cultivate thoroughly, and report next August in the *Genesee Farmer?*

You will recollect last harvest I reported some prolific wheat. This that I now count from is of that root, and yields over two thousand one hundred and sixty fold. I always *thought* old Jethro Tull was right, and now I know he was right.

*Rochester, Ind., July 15, 1858.* CHAS. BRACKETT.

P. S. Give this an early insertion, as the wheat should be in by the middle of August to escape rust: I think better the middle of July. C. B.

## DISEASES OF THE HORSE.

Editors Genesee Farmer:—I have had much to do with horses for forty years, and trading considerably, I have had disordered horses put on me by unprincipled jockies, and I have therefore a goodly number of remedies for their diseases, many of which have never been published. I propose, therefore, to give the readers of your valuable little monthly some of my remedies, and hope that others will not hold back any valuable information they may possess. Many, truly, are so contracted in their feelings, prompted by the prospect of gain, that if they have any important remedy tor the ills of the horse, or of the human family, they cannot upon any consideration make its preparation known. "No, indeed! this is my craft," say they; and they are stealthily preparing and sending out the worst of impositions among the people. Every honorable, high minded man, who is influenced by proper motives, is not only willing but anxious to contribute his mite for the general good. Now an opportunity is offered through the columns of the *Genesee Farmer*, which I think all must admit is not only the cheapest, but in reality the best paper of the kind for the size.

A Remedy for Bots.—To one pint of strong sage tea mix one pint of molasses, and add from two to four ounces of powdered alum, and pour it down. In from two to four hours give a good dose of oil or salts, unless it works off without. It is very difficult to drench some horses; they will not swallow when put into their mouths. In that case pour it in at the nose, if a common drench that is not too strong; whiskey, turpentine, soap, &c., are too strong to give by the nose.

For Distemper.—Give a horse one or two ounces of tar, twice a day; put it in their mouths off of the tar-paddle, and they will generally swallow it. When he swells under the throat, smoke his nose well with cotton rags, feathers, &c., to forward the discharge of matter, and when that begins to appear, pour a table-spoonful of tincture of camphor into each ear once a day. His food should be light—green if to be had, with bran and oats, with a spoonful of tincture of camphor in his bran every day. The camphor in the ears and food may not need to be given more than every other day; you must be guided by the urgency of the case.

For Cholic.—Dissolve as much salt as will do in a pint of warm water, then add a pint of vinegar; give the horse half the mixture, and if that does not relieve him in half an hour, give him the balance, and a cure may be expected.

A Dutch cure, by which many horses have been cured, is to urinate in the right shoe and pour it into the left ear, or *vice versa*.

For Founder.—A recent founder may be easily cured by giving, if a large horse, a pint of salt dissolved in water, at a single drench; give him exercise but no water for a few hours after, and then sparingly for a day or two; feed light, and green would be preferable.

For Sweeney.—Take equal parts of good whiskey and pure clear spirits of turpentine, shake well, and pour on a small quantity and rub it in, whether shoulder or hip; then bathe it in well with a hot iron. You will most likely have to confine the horse to keep him from biting the part. Keep him out of the weather, feed light, and let him rest.—Repeat the operation about every third day. Strong salt water rubbed on the part every other day, as hot as can be used without burning, will cure the sweeney on some horser, and they may be worked moderately all the time.

For Fistula.—Before matter collects, roast a good parcel of poke root, and when thoroughly done split them open and take out the hard pith; lay the pieces with split side down on a cloth; be quick, and when a place as large as your two hands is covered lay another cloth on,—or it the one is large enough, turn it over the top of the roots,—raise it up on your hand and press it on the swelling, split side of the roots downward. The horse will rear, and possibly kick, but hold it on until it cools. It may be necessary to repeat the operation in a day or two, if the swelling does not begin to go down. If it breaks, treat it as described in the May No. for poll evil.

Condition Powders.—Take rosin, aloes, copperas, and saltpetre, of each one-fourth pound, and powder them well; then take half pound of anise seed, grind fine, and mix all together thoroughly. Give one or two table-spoonfuls every two or three days. Draw out the tongue gently, put the mixture far back and let go. With generous feed, you will in a few weeks see quite a change in the appearance of your rough-coated horse.

*Neosho, Mo., June, 1858.* A. YOUNG.

## HOVEN IN CATTLE.

Messrs. Editors:—I have had occasion this spring to notice the effect of clover on cattle, as to bloating. I have had them bloated, and relieved them by tying a large rope in the mouth and above the horns, by which means the gas has escaped and they were cured. Sometimes I have just watched them, and in a quarter or half an hour the bloating has subsided. My conclusion now is, that where cattle are in clover when wet either with dew or rain, the eye of the owner must be upon them, in readiness to relieve if they are very much pained. I think some chemical agent poured into the stomach, so as to change or decompose the gas generated there, would be the best and readiest mode of relief. The great point is to watch them when there is a probability of their bloating, and be ready to give them *prompt* relief. I lost our best cow week before last. She had a tendency to bloating, either from her greediness, or constitutionality. I had relieved her several times, but one morning the boys turned the cows out of the field into the road; they went off, and in about twenty minutes she was dead, though she showed no symptoms of uneasiness when turned out. I have experimented in various ways, by turning them in for an hour, an hour and a half, or two hours, still watching them; I have also left them in all day, and think on the whole that is the best way, if they are well watched.

*Mansfield, Ohio.* CHARLES PALMER.

Kicking Cows.—I have a way to stop kicking cows, or to keep them from stepping while milking. It is this: I begin quite moderate, and when they hoist a foot I give the teats a jerk; by following this up it will stop any cow, for a cow very much dislikes to have her teats jerked. If a cow gets in the habit of starting off, I hold on to the teats as hard as I can, which soon cures her of that caper. *—*Gibson, Pa.*

## FOOT ROT IN SHEEP.

MESSRS. EDITORS:—I notice Mr. W. BROWN's inquiry about foot rot in sheep. "1st Cause:" Soft, spongy land is most generally the cause, but standing in dirty yards, on their own manure, is sometimes the cause. Overstocking is often the cause; the land becomes foul; the sheep only eat the herbage because hunger compels them, and not because they relish it; this will cause foot rot, scab, and ticks. "Cure:" Pare the diseased feet thoroughly with a sharp knife. When much diseased, the hoof separates from the sensitive parts, and that part of the hoof must every particle be removed. Then apply a salve composed of pulverized blue vitriol with lard or butter; if in hot weather, it is better to mix a little tar with the salve, to make it more adhesive. The best way to pulverize the vitriol, is to hang up an iron pot with a rope or chain, put in a half pound of vitriol, and then a canon ball; by taking hold of the pot with both hands, and giving it a certain motion, which any man will soon find out, the ball rolls on the vitriol and pulverizes it, and the finer it is ground the better.

The whole flock should have their feet examined and pared—sound and unsound—paring off all loose hoof of the unsound, and the salve applied to both sound and unsound. The unsound should be separated from the sound, and at the expiration of about three days give the unsound another dressing with the salve, examining closely to see that the paring has been effectually done. Go over the sound ones in a week after the first dressing, and give them another dressing with salve between the hoofs, and if none are found ailing they may need no further attention, but it is safer to give them two more dressings, say ten days to a fortnight apart. The unsound should be dressed every three or four days for three or four times, when they ought to be cured; but it is safe to give them a dressing once in two weeks for several times. It requires great *vigilance* to effect a cure.

The disease is as contagious as the *plague*. I have seen young lambs, at four days old, walking on their knees to save their sore feet. When the State of New York contained over six millions of sheep, the foot rot prevailed to an alarming extent; but now that the State contains only about three millions there is very little foot rot, or at least I do not hear much of it.

If Mr. B.'s land is soft and wet, he will have to reduce his sheep stock or drain his land, or he wont keep them cured. A hardpan subsoil which comes near the surface is bad for foot rot, because the soil remains long wet after every rain. Shallow surface drains, say about seven inches deep, (they can be made by the plow,) help such land wonderfully for sheep pastures, and in fact on all wet hilly land they do much good. The drains should not be straight up and down the hill, but slanting,—the furrow being turned to the lower side, which prevents it from filling up the ditch. Persevere, Mr. B.,—study and apply *common sense*, along with the hints I have now penned, and I know you will succeed.

*Near Geneva, N. Y.* JOHN JOHNSTON.

"The cause of the disease in sheep called Foot-Rot," (inquired for by W. BROWN,) is usually contagion with infected animals, or with the virulent dischargo from the same. It is sometimes said to appear in a mild form, attended with little or no danger, but this is not often the case, and these mild attacks are often followed by those of the severest kind. It was first known in Germany, after the introduction of the Merino sheep, and has probably followed them to England and this country.

Foot-rot first shows itself, says an English writer, in the limping gait of the animal, which gradually increases; generally commencing with one of the fore feet, afterward both are affected, and at last this lameness extends to the hinder feet, with increasing bodily weakness. The diseased foot is hot and swollen, and the skin of the coronet is inflamed. An acrid humor exudes, which thickens on exposure to the atmosphere, and inflames and destroys the surrounding skin, and in time, if neglected, the very foot itself. It oftenest occurs among the finest wooled sheep, and is of a very infectious nature, spreading through an entire flock in a month or two, and often taken by sound sheep from merely passing through pastures or over roads where those infected have recently been driven.

The cheapest and least troublesome remedy, is that promulgated by Mr. HOWLAND, of Cayuga co., N., Y., through the Albany *Cultivator*, some twelve years ago. He has used it very successfully, eradicating the disease entirely from his large but badly affected flock. It consists in simply mixing flour sulphur with the salt given to the sheep, in a proportion just sufficient to discolor perceptibly the salt, or about one twentieth part. They are regularly fed with this mixture the season through. In large quantities the material is very cheap, and its administration is attended with but slight trouble.

An Ohio wool-grower of long and large experience, relates, in one of the early volumes of the *Ohio Farmer*, his experience in curing foot-rot in sheep. His practice was different from Mr. HOWLAND's, and his success for a long time doubtful; but he at last succeded in eradicating it from his flock. He bought a few over one hundred high-bred, fine-wooled ewes, knowing they had the rot, but thinking to cure it with little difficulty. With nippers and sharp knives the diseased parts of the hoof were clipped and pared away, as long as *any* appearance of unsoundness was seen. The feet were then immersed in a solution of blue vitriol and vinegar, as strong as the liquid would dissolve when boiling hot, holding them in long enough for the powerfully corrosive solution to penetrate the foot thoroughly. This was done to every foot, of every sheep, whether they showed signs of disease or not. They also had abont half a pound of sulphur in their salt once in two weeks. This treatment was followed up, at intervals of ten days or more, nearly eighteen months,—for though they often appeared to be cured, the disease would break out again with renewed violence. He finally placed those which remained *cured* for two weeks in a separate enclosure, and *burying* the last case, removed the disease entirely. Other remedies might be mentioned, but the above are probably as good as any, and we will not detain the reader.

In the last *Farmer* I notice the inquiry, "Is the foot rot in sheep contagious?" It is established among the farmers here that it is, and my own experience in the matter is as follows:—I had a very fine flock of sheep, divided into three lots, or flocks. At the time of washing I was sick and not able to

be out. and directed my men to take the sheep to the washing-place and wash them, each flock by themselves; but before they got to the place, a large flock of sheep, having the foot-rot very badly, had been put in; as soon as they were out, mine followed in two flocks, one after the other. When through with these, the men came for their dinner and the third flock of sheep; I inquired what had detained them, and they told me such a flock was in before them. I then directed them to take the other flock to another place, where there had been no foot-rot; they did so, and that flock escaped the rot, but both the others had it in about two weeks, nearly every sheep in the flock at the same time; and I have never known a flock escape having it, that had been exposed in the same way. S. M. Ely.—*Ripley, Chautauque Co., N. Y.*

In the July number of the *Farmer*, Mr. Brown, of Clark county, Ohio, wishes to know the cause and cure of foot-rot. It is caused by running in wet pastures, and is contagious. To cure, take equal parts of sulphate of copper (blue vitriol) and verdigris, pulverize, and apply after paring off the foot to get at the part affected. R. A. G. Hyde.—*East Aurora, Erie Co., N. Y.*

## CURE FOR FOUNDER IN HORSES.

In the February No. of the *Genesee Farmer*, page 55, is found a receipt for founder in horses. I will give you my plan, which I have followed for thirty years, more or less, and have never known it fail: When a horse is exposed by eating grain, or drinking when hot, I take a rope or stout strap and tie up one foot so that he cannot get it to the ground, thus compelling him to stand on three legs; I then take a nail gimlet and bore into the frog of the foot until I start fresh blood. If the horse has not been foundered before, and the operation is speedily performed, a cure will be accomplished: twenty-four hours after the founder may be too late. The gimlet will bring out clotted blood, but by perseverance fresh blood will come, if the work has not been too long deferred. Great care must be exercised, or the horse, by a quick start, will twitch the gimlet out of the hand, get his foot loose, and stamp the gimlet into his foot; this would ruin the horse. If a gimlet can not be had, a sharp knife, or any thing that will let out the blood under the frog, will answer the purpose.

Also, by boring into the frog of the foot of any horse, you can tell whether the horse is fonndered any, or how bad. If badly foundered, it will be difficult to start blood; if only partially, particles of clotted blood will appear in the gimlet.

*Gibson, Susquehannah Co., Pa.*

To make a good Cement Cellar Bottom.—Take one-third hydraulic cement to two-thirds good clean coarse sand, (very coarse,) put on two inches thick, all put on at once. The sides may be of the same, put on in two coats, three-fourths of an inch thick each. H. B. Ward.—*Sugar Creek, Ind.*

Large Yield of Corn.—Dr. J. W. Parker, of Columbia, South Carolina, according to the report of a committee of the State Agricultural Society, raised the premium crop of Indian corn, amounting to *two hundred bushels and twelve quarts per acre.*

## MULES vs HORSES.

The mule, in some parts of the country, is taking the place of the horse, to a great extent, and if our farmers would make experiments to find the relative value of the two, they would adopt the mule to a much greater extent than they have done heretofore. We should try to have those animals which will cost the least for raising and keeping, and do the most work, as far as we possibly can; and in order to do this, I know of no better plan than to learn the experience of the farmers, through the *agricultural papers*. I think mules are preferable to horses in several respects:—

1. They are much more easily kept than horses. They eat less than horses,—are better able to sustain themselves on wild pasture,—will stand harder treatment, coarser and inferior fare, and do not give as much trouble. Their bill for shoeing and doctoring is not one-half as much. The cost of raising a horse, till it is three years old, is variously estimated at from $35 to $85, and of the mule, for the same length of time, from $20 to $30, and sometimes even less.

2. They are more easily disposed of, in lots, at any time, at good prices; prices ranging from $90 to $130, and in some places, good, large sized five-year-olds bring from $175 to $200.

3. They are fit for service much sooner than horses. At two years old, they are generally considered capable of performing labor, while the horse is not for at least a year later.

4. They are almost entirely exempt from disease, and such diseases as they are liable to, are easily cured. The horse, being excitable and suspicious, is easily urged to a much greater amount of exertion than he can bear, especially so with speed; but the mule, being calm and pertinacious, is able to resist all the stimulants to over-exertion.

5. They live to a much greater age than horses, having been known to attain the age of seventy years. They are strong and good workers at the age of twenty-five to thirty years, or more. The average age of the mule is twice that of the horse.

If mules are managed properly in breaking, not one in ten will be stubborn. In plowing corn, &c., they do not break down near as much as horses.

*Laceyville, Ohio,* F.

Fattening Sheep.—About the beginning of October I set apart the sheep that I intend to make fat, put them into a good pasture, and give them a little grain once or twice a day; one bushel of grain at this season is better than two bushels in cold weather. When winter begins to set in, I prefer a shed open to the south, with cribs to hold their feed. In the morning I give them peas in the straw, cut green, and turnips after; a couple of sheaves of oats at noon, and turnips and peas at night. Common sheep, fed in this way, can be made in the spring worth $8 or $10. Those that are disposed to feed sheep or cattle, ought to raise three or four acres of Swedish turnips; feeding on grain is expensive, and sometimes does not pay very well. Give them plenty of litter, and as many turnips as they can eat, and you will have a heap of manure that will pay you for your trouble, and of far more value than all the composts of old leaves, old shoes, and old trash, that you can scrape together. W. X.—*London, C. W.*

## AN INTERESTING LETTER FROM INDIANA.

Eds. Genesee Farmer:—I have been a reader of your valuable paper for some years, and I have thought of many questions which I would like to have argued through it, but the idea of having both the *Farmer* and questions answered for fifty cents, was, I thought, too much of a good thing. I have tried to get others to subscribe; but their answer is, I am taking one or more weekly newspapers, and can not take any more. Now, I can not, nor will not, do without a paper containing the general news; but I do not consider the *Genesee Farmer* as interfering with those papers, for when they are read they are destroyed; for although they contain a vast amount of useful matter, it is almost impossible to find anything for the want of an index. I have often seen valuable receipts in those papers, but when they are needed they can not be found. Now I would say to all persons, give your receipts to a paper published in the form and manner of the *Genesee Farmer*, and the receipts, paper and all, will be preserved, for such a paper is nothing more nor less than an unbound book.

I am surprised at not seeing more advertisements of farming and other labor-saving implements in your paper. Very often such advertisements come at a time when the farmer has no idea of ever wanting anything of the kind; but perhaps in the course of a few months something may turn up that will cause him to want something of the kind, and all he has to do (if the advertisement has not been continued up to the time) is to consult some of his back numbers; whereas, in a paper containing general news, it would have been destroyed.

I would like to have a little advice from you, or some of your correspondents, upon the manner of fattening hogs. I believe it is generally considered that farmers are not a very intelligent class, or at least not very scientific. Now, if some of those persons entertaining these opinions were to visit our part of the country, they would come to the conclusion that we had constructed our hog pens on a scientific principle—provided our principal object was the waste of manure. I will describe one of these pens—and they are all about alike,—not that I want any of your readers to copy after them, but that they may assist us in remedying this great evil, namely, the waste of manure. The great object in making the selection of the ground for the pen, is to get a rolling piece of land, with a stream of water flowing through. It is fenced, and a pen made of rails, generally without a roof, for the reception of the corn. This land is nice and dry until the rains set in; then if you could see us with a basket of corn on our shoulders, wading through the mud, hunting for a place where the corn will not sink so deep but that the hogs may find it by taking considerable of a dive into the mud, you could give us another chapter in the experience of farmer Slapdash.

Some years ago, an article was published in the *Genesee Farmer*, showing the great benefit it would be to the western farmer to feed his grain to hogs and cattle, it costing so much less to send the meat than the grain to a distant market. But one great object of the article was to show the large amount of fertilizing matter that was left upon the farm; but so far as the manure is concerned, we gain nothing, for it is all washed off by the stream of water. Now what I want you to do is to convince us, if you can, by facts and figures, that hogs can be fattened in a small wooden pen cheaper, to say nothing about the manure, than by our mode. Some of our best farmers believe that swine will not fatten well on a wooden floor. A pen could be built of wood to feed in, but unless the corn was shelled or crushed, they would carry it into the mud. Then of course we must provide ourselves with a crusher, and in that there is some difficulty. I have consulted our report of the State Fair for 1854 and 1855. The reporter says he inquired of the exhibitors of fat cattle whether they used crushers, and how they liked them. Their answers were that they had not much of an opinion of them, for they require too much labor for the profit, and that they wear out too soon. I, of course, do not expect you to give an opinion concerning the last or value of any particular crusher, but I do think the manufacturers ought to satisfy the public that their machines will not only crush well, but that they will last long enough to repay the purchaser.

*Pike Co., Ind.* GEO. W. MASSEY.

## LETTER FROM NEBRASKA.

Messrs. Editors:—I am situated on the Platte Valley, the "Garden of Nebraska"—so called by Nebraskians—about sixty miles west of the Missouri river, on the north side of the Platte or Nebraska river, which is from half to one mile wide, current swift, water shallow and turbid, full of sand bars and shifting sands, which render it unnavigable. The valley is from three to ten miles wide; soil various, from river sand to a stiff brick clay, but mostly of a black sand and clay intermixed, overlaying a stratum of black clay, which rests on quicksand. Timber is scarce, mostly cottonwood, with a few elms, oaks, etc., mostly on islands and along the borders of the streams.

As it is but two years the first of April last, since the first settler located in this valley, west of the Elk Horn river—a tributary of the Platte, about thirty miles west of the Missouri—we have done but little towards raising our own supplies, but have large crops of corn, potatoes and buckwheat, and some fields of spring wheat and oats. The grains look fine. Corn, although got in very late, owing to wet weather in May, is doing well,—except that on sod, which is backward and does not promise much.

The valley, for about a mile and a half along the river and military road, is all claimed, with all the islands and timber on the north shore to the mouth of the Loup Fork, about ninety miles from the Missouri; also up the Loup for twenty-five miles to the old Mormon fording-place, where they have a town of some eighty families. There is also a settlement of Germans at Grand Island, about thirty miles east of New Fort Kearney and ninety miles west of the Loup. Both the above settlements were commenced last season. There is considerable game here, consisting of elk, deer, and antelope. Wolves are also plenty. E. H. BLIVEN.

*Buchanan, Platte Co., N. T., June 27, 1858.*

To rid Sheep of Ticks, and cure the scab on cattle, feed sulphur with the salt, at intervals of a few days, three or four times.

## A MISSOURI FARM.

We recently visited the farm of Mr. Richard Gentry, of Pettis county, Mo., and as we have frequently seen flattering accounts of large farms in other States, we have concluded to furnish a description of this farm to our readers, in order to show that Missouri is not behind her sister States in large farms or good farming.

The farm of Mr. Gentry contains seven thousand acres of land, three thousand five hundred acres of which are under excellent fence, and in a high state of cultivation. It is divided, chiefly, into lots of forty acres — making over thirty miles of fence on the farm. The fence is mostly made of rails, with stakes and riders, and kept up in the best condition. There is, however, a mile and a quarter of post and board fence on the farm, and some two miles of Osage Orange hedge, which, however, has not yet been turned out.

There are on the farm sixty-five large gates, of the best construction, and about the same number of draw-bars. The gates and bars are made in a large carpenter shop, in rainy weather, when the hands can be employed at nothing else. All of the implements are put in repair at such times, and many of the simpler ones manufactured. About two-thirds of the farm consists of high rolling prairie, of an excellent quality of soil, and the remaining third is in timber, immediately adjoining the prairie.

There are fourteen hundred acres of the farm set in blue grass, seven hundred and fifty acres in clover and timothy meadow, three hundred and twenty acres in corn, one hundred and sixty acres in oats, twenty acres in Hungarian millet, and the balance of the farm under fence is in woods pasture.

There are on the farm twenty-seven large, artificial ponds, many of them of much depth, affording stock an abundance of water at all seasons of the year. During our visit three stone masons were employed in erecting large stone pillars in various parts of the farm, at the outlets of streams, in which large water gates were to be hung, so that in case of freshets, which are common on large prairies, the gates would open by the action of the water, and close when the water had passed, and prevent the fence from being washed away, and the escape of stock from one field to another.

One of the most striking features observable is, that on this immense farm, not a single weed is to be seen. Even the fence corners, those common receptacles of all that is foul, on most farms, are as clean of weeds as any city lawn. What do farmers who have but two or three hundred acres under cultivation, say to this? Here are upwards of thirty miles of fence, without a weed or briar surrounding it, while many farms, with only a mile or two of fence, raise enough weeds to seed the whole neighborhood! The whole farm is a pattern of neatness. The hands pass over every field, as often as it is necessary, and pull up every burr, briar and weed that dares to show itself. This has been done for many years, until the weeds are subdued.

Mr. Gentry has been a large sheep grower. Some fifteen years ago, finding the market dull for horses and mules, he concluded to try sheep. He accordingly procured from Kentucky some 400 head of the best Saxon and Spanish merino ewes, as the foundation of the future flock. These he raised for a number of years, increasing the size of his flock till it ranged for many years from two thousand eight hundred to three thousand head. He went to great expense in procuring the best bucks, and, by judicious management, obtained a very superior flock. For the last four or five years he has been crossing his flock with the French merino, paying as high as one hundred and fifty dollars per head for the bucks. He has some imported bucks of this breed now on his farm. He thinks the French merino superior to the Saxony or Spanish merino, as possessing more constitution, greater weight of carcass, much greater weight of wool, though not of as fine a quality, yet sufficiently so to command as high a price in market. He has had the very best success in raising sheep — his flock has never been affected by any contagious disorders, and many of the diseases so prevalent at the East have been entirely unknown in his herd. He has recently reduced the size of his flock to about 1000 head, for the purpose of giving more attention to raising mules. He is already quite extensively engaged in this business, but intends to give it more prominence hereafter.

There are kept constantly employed on the farm twelve grown hands and six boys. Our readers may wonder how so large a farm can be so well managed by this small number of hands. It was a wonder to us until we saw the perfect system of Mr. Gentry's plans. Every thing moves like clock work. There is a time for every thing, and every thing must be done in its time. There is no hurry and flurry—but every thing moves along evenly and quietly. Each piece of work is attended to till it is done. But system is not the only secret of his success. All of the best labor saving implements and machines are used by him — so that with one man he is able, in many kinds of work, to perform the labor of ten men. By this means he is able to accomplish this vast amount of work.

Mr. Gentry has a number of buildings erected, in which he carries on, for his own use, various operations not common among farmers. For instance, there is a large mill house, where all the meal for the family and stock is ground, and where various other mills and machines are used. There is also a large slaughter house, with kettles set in arches, and an excellent apparatus for rendering out lard. Then there is a tool house, a carpenter shop, a harness house, a shop for making shingles, &c., &c.— There is also an excellent pair of Fairbanks' cattle scales, which will weigh six tons at each operation, with all the appendages for weighing cattle, sheep, swine, hay, grain, &c.

But the next question is, will farming on such a magnificent scale *pay?* Of course it will. Any kind of honorable business, managed as well as this farm is, would pay large profits. Upon our inquiry, Mr. Gentry informed us, that the gross receipts from this farm last year amounted to over twenty-seven thousand dollars.— *Valley Farmer.*

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To prevent Sheep from Scouring, when first turned to grass in the spring, give no salt from the time they are turned out until after shearing, — or, what perhaps is better, let them have access to salt at all times, summer and winter. Either plan will produce the desired effect.

## PROFITS OF FARMING.

We believe there are many farmers, as well as others, who take an incorrect view of the business of farming, as far as its profit is concerned. They seem to suppose that what is sold from the farm is all that is to be counted as profit, while no note is taken of what goes to support the family, or is invested in improvements on the farm. To give an instance, I will refer to a conversation I had with a man who was once a farmer, but now has his capital in money at interest. He has some four thousand dollars out, and he tells me that it is only with strict economy that he makes the interest support his family. In this section of country, the average value of the farms is below the sum referred to, and, notwithstanding the long cold winters, the farmers are in a thriving condition. So, we doubt not, it often is with the farmer: that which he and his family eat, drink and wear, is often overlooked in considering the profits of the farm,—not counting anything but the cash left at the end of the year. This is not treating the farm fairly. In one case the farm is capital, and in the other the capital is funds; that which goes to the support of the family, is as much the product of capital in one case as in the other, and in both should be considered as profit; and if the farmer, after the maintenance of his family, and paying the expenses, (which in these times are no small matter,) has one or two hundred dollars left to do as he pleases with, it surely can not be inferred that the farmer's profits are least.

But, say some, the farmers have to work so hard for a living that they do not like the business; but I would like to have you show me a class of men that have so many leisure hours as the farmers.—Quite too many young men, at the present day, seek other employments than farming. In this section of country, stock-raising is one of the most profitable branches of farming, and the dairy business is beginning to attract considerable attention. The country through here—say the northern tier of counties in Pennsylvania and the southern tier in New York—is as good a stock-raising or dairy country as there is in the Union. Before the farmer concludes that there is no profit in farming, let him look at the whole ground, and a different conclusion will be reached. J. O. DAWES.

*Le Raysville, Pa., July*, 1858.

## TO MAKE FARMING PROFITABLE.

In order to make farming pay, the science of farming must be understood. To those who profess to cultivate the soil, and find it unremunerative, I think their want of success might be attributed, generally, to their ignorance and want of system in their general management.

Remember, farmers, your pursuit is a noble one; but to make it noble and elevated, requires the exercise of mind as well as muscle. It is a vocation requiring intellect of a superior order; and whoever would attain that intellectual greatness requisite for a scientific and systematic agriculturist, must read, study, and reduce to practice.

Take, for instance, the man who has risen to eminence in his profession, and who makes that profession pay, and he will tell you that ease and idleness have been strangers to him—that years of hard study and deep research have earned him his high reputation and his well filled coffers.

Again, look at the successful merchant, and where does the secret of his prosperity lie? In his perfect knowledge of his business, his marked attention to it, his systematic management, and his prudent forethought.

Another comparison might be found in the skillful mechanic, who commands high wages and steady employment because of his superiority as a workman. He, too, will tell you that the pecuniary advantage arising from the knowledge he now possesses is ample compensation for all the sacrifices he had to make during his four or five years apprenticeship.

From these comparisons, then, I think the inference may be drawn that knowledge is necessary in order to conduct any business profitably and honorably. Is it surprising, then, that "farming wont pay" while the majority of our farmers think it madness to devote an hour to study the nature of the soil they profess to till, and would consider it folly unpardonable to subscribe for an agricultural paper, because, say they, the ideas and suggestions contained therein are theoretical only, and to make them practical would bring ruin upon us? To those farmers whose ideas are so contracted, whose reasoning powers are so rusted, I would say, cultivate your minds, as well as your fields; you will find worldy wisdom in it; and in order to make your farms a source of profit, you must aim to understand your vocation and to conduct it systematically. Go at it energetically and perseveringly, and you will profit by it. Farmers! arouse from your lethargy; make the effort: success and prosperity will be your reward. I. R.

*Hamilton, C. W.*, 1858.

Rarey's Method of Horse-Taming.—The *Scientific American* says:

"This new system of taming is founded on the well-known process employed in subduing buffalo calves and wild horses taken by the lasso, and consists in simply gradually advancing towards the horse to be subdued, until you are able to place your hand on the animal's nose and over his eyes, and then to breathe strongly and gently, as judgment may dictate, into the nostrils. We have the authority of Catlin, in his 'Letters and Notes on the American Indians,' that this process is the one practiced by the Indians in taming the wild horses of the prairies, and that it is invariably attended with success."

Catlin says:

"I have often, in concurrence with a known custom of the country, held my hands over the eyes of a buffalo calf, and breathed into his nostrils, after which I have, with my traveling companions, rode several miles into our encampment, with the little prisoner busily following the heels of my horse the whole way, as closely and affectionately as its instincts would attach it to its dam. This is one of the most extraordinary things I have witnessed since I came into this wild country; and although I had often heard of it, and felt unable exactly to believe it, I am now willing to bear testimony to the fact, from the numerous instances which I have seen since I came into the country."

## WORKING ON THE ROAD.

Last week we were notified to work out our road tax, the Path-master calling for team, wagon, shovel, and hoe, and setting us to drawing dirt from the loamy part of the district upon the road of the clayey part. A very good practice, no doubt, in many instances; but in our case, the great need of the road was side ditches, and the reason why we do not get them is because the amount of work assessed to us will do but little toward constructing all that are needed, in one year. So at least Path-master D. says; and the same reason is often urged in other districts. Some of us contend, however, that the true policy would be to make the road *right* as far as the labor goes, and in time the whole would be put in good order.

In road-making, one great requisite is the ready and total removal of all water. A good road is impossible where water stands by its side (anywhere near its level) or in it. If the ditches have no free outlet, the road will soak up the moisture more or less, becoming soft and rutted in consequence. It is in vain to think of having a good road over a subsoil filled with stagnant water. We must provide for their thorough drainage, either by surface or covered ditches, with sluices wherever needed, and free passage into the fields adjacent.

The road-bed should be elevated and slightly rounded, that the water which falls may run off readily into the ditches. If the soil is clayey or loamy, a few inches of gravel, or even coarse sand, will very much improve the track. If sandy, it needs a slight addition of clay to correct it, and a great improvement of sandy roads can thus be effected. The road will be less dusty, less liable to wash, and present a firmer, pleasanter passage to both team and vehicle.

A great improvement in the condition of our roads has been very cheaply effected by the use of the scraper or leveler, which is "just the thing" for filling ruts, removing stones, and clearing off obstructions generally, and should be used several times in the course of the season on most road districts.

J. H. B.

## A BOY'S THOUGHTS ON SOME FARMERS' PRACTICES.

When I see a straw stack standing year after year, without enriching any ground, thinks I to myself, how much better had it been for the owner of it to plow and fit his potato ground, drop his potatoes, and cover eight or ten inches with that same straw.

When I see a man dropping his potatoes in rows, four feet each way, and dropping three or four in a hill, thinks I to myself, how much better if that man would drill his potatoes, dropping them from twelve to eighteen inches apart one way and four feet the other, — always cutting them, and putting only from one to four eyes in a hill.

When I see a man cutting down the only tree in his pasture field, thinks I to myself, how much better would that man leave that tree standing for his cattle a shade in a hot summer day.

When I see a wood pile lying on the side of the road, thinks I to myself, how much better had that man taken his wood pile to the back yard.

*Near Milan, Erie Co., Ohio.* JOEL WOOLVERTON.

## SHOWS FOR SEED WHEAT.

In reference to my proposal of county shows for seed fall wheat, you ask the question, why I wish to show seed *wheat?*—why not other grain?—and why will not our general agricultural shows answer quite as well? In reply, I would say—

1st. Because no other grain is of so great importance, either to the farmer or to the community at large, as fall wheat.

2d. Because there are a great variety of kinds of wheat, and one kind is better than another; of this fact many farmers may be ignorant, but if they can meet their fellow farmers with the superior kinds of wheat, and talk the matter over,—and that too just at the time they want to sow,—they will be likely to be induced to purchase the best.

3d. Because we are at present destitute of any certain market to which we can repair, either to sell or buy the best kinds and quality of seed wheat; this would afford just the market we need. Then all must admit that frequent changes of seed are advantageous, and at such a show or fair would be the *place where* and the *time when* such changes could be made. And as some kinds are less liable than others to the attacks of the midge, here you would meet the best farmers in the country, and hear their experience on all such matters.

Hence I conclude, Messrs. Editors, that a show of fall wheat, on or about the first of September, in each county or State in all the wheat-growing sections both of Canada and the United States, would be beneficial. Let us hear what others say on the subject.

T. KING.

*Ryckman's Corners, C. W.*

## THE BAROMETER.

We all know how important and almost indispensable this instrument is to nautical men for the safety of their lives and ships, in forewarning them of impending storms. While not so important to landsmen, it affords a subject of interesting study, and is of great practical value to agriculturists. It has been a matter of surprise to me that it has not been recommended in our agricultural papers for general use by farmers. It is rarely you meet with this instrument in their houses. In my own experience in the use of it for some years past, I have come to regard it as indispensable to the best results of my farm operations. It has enabled me to time my planting, sowing, haying, and harvest, generally to better advantage than many of my neighbors who consult only "the signs of the sky;" and, acting on the indications of my barometer, I am considered very weatherwise by the men employed on my farm, and am often asked how I am able to anticipate the rains and storms. A few weeks' use of the instrument will satisfy any careful observer how valuable it must be to farmers. A very good instrument can be had for $10 or $12. To enable one more readily to understand its use, books have been published, giving instructions for making observations. I believe Mr. Kendall, of Rochester, N. Y., who makes the instruments, has published a small manual to accompany it. A small work entitled "*Science of Things Familiar*," beside giving rules and instructions for using the barometer, contains valuable instruction on many other subjects, and ought to be in every family library. R.

### GUESSING.

The area of every enclosure on a farm ought to be ascertained, in order to determine with some degree of precision the quantity it produces per acre, as well as the quantity of seed and plaster sown per acre, and to regulate the manuring and the labor with some degree of accuracy. Fields being generally rectangular, very little difficulty would arise in determining the number of acres in each, and when once ascertained, a record could be kept that would render further trouble unnecessary. Many farmers depend too much on *guessing*, as to the quantity of the land and the products per acre, and those who are not pretty knowing in such matters are supposed by some occasionally to make great mistakes, that sometimes involve a suspicion of their veracity. If the size of fields and the amount of their products were accurately registered in a book kept for that purpose, it would be but little trouble; and it would furnish an agreeable amusement for a rainy day, to compare the products of different years from the same ground. By this means, a farmer would always be able to determine the improvement and increased fertility of his farm, and if at any time he should incline to furnish an agricultural journal with the results of any of his operations, it could be done with confidence as to its accuracy which would be satisfactory and instructive. A farmer should never guess at results, when he has the means in his hands of arriving at the truth so easily. Keep a regular account of all articles sold and purchased, and at the year's end balance your book, so that you may know your latitude and longitude, and not be in danger of receiving a visit from the sheriff.

*Sand Brook, N. J.* J. T. SERGEANT.

### RUST ON OATS IN KENTUCKY.

Editors Genesee Farmer:—The rust has ruined our oats. There will not be saved in this, or any of the adjoining counties, one half enough for seed. It is something unheard of, by the oldest of our farmers. We had, in the months of April and May, an unprecedented amount of rain. The rust first made its appearance upon the low lands, whence the disease spread to all parts of the farm, as though it was subject to the laws of an epidemic or contagion. It attacked different crops at different stages, but all previous to the appearance of the head. In fact, the blades seemed to be the part primarily attacked, the straw in many instances being remarkably exempt from rust. Can you tell us anything about the cause of it, and do you think that wheat upon the same ground would be more liable to rust than on a different piece of ground? Will you, or some of your scientific farmers, give us your views, experience, or observations? We would like to hear from Mr. John Johnston, especially.

*Buller Co., Ky.* R. B. MOREHEAD.

Kindness to Domestic Animals makes the animals to love you, and even the hogs will give a grunt of pleased recognition when they see you. It promotes a kind disposition in the animals—makes them feel nice, and fatten easier. It also re-acts on yourself, and will make you kind to others.

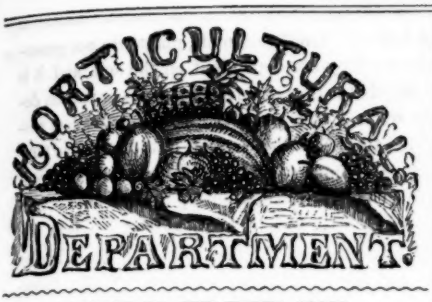
### JUDGE BUEL'S APPEAL TO YOUNG MEN.

Editors Genesee Farmer:—It may not be generally understood, by all your *young* readers, that the subject of Agriculture was one in which Judge Buel distinguished himself, by devoting to it his powerful energies, his great and comprehensive mind and ready pen. From a volume of the *Cultivator* before me, commenced in March, 1834, I take the following appeal to young men. Read it *all*, young readers of the *Farmer*, for I assure you it has lost nothing by age. Read it all, and keep alive the memory, and cherish the principles of those dear departed ones who have gone before us, and have labored incessantly for our good.

O. B. S.

"The young men we would especially appeal to. You are destined soon to occupy the stage of public action, and to fill the important stations in society.—*Now* is the time to prepare for these high duties, as well as for profit and distinction in your business. Your characters are but partially formed, and are yet susceptible of receiving good or bad impressions, which are to last through life. It is important to you, to your friends, and to society, that these impressions should be for good. We will lay before you rules and examples of the wisest and best men, to aid you in the formation of your characters—to enable you to become intelligent and successful in your business,—useful and respectable in society,—and beloved and happy in your families. Do not object that you have no *time* to read. Few young men labor more hours than did Benjamin Franklin, or are more humble and self-dependent than he was in his youth, and yet Franklin found abundant time for self-instruction; and so indefatigable and successful was he in his studies, that he became one of the most useful and celebrated men of his age. We need not limit the remark to Franklin: most of the distinguished men of the day have risen from humble stations by their own industry and frugality, and have acquired a great share of their knowledge in the hours not allotted to ordinary business. Your winter evenings are your own, and may be applied usefully. They may be computed at one-fourth of the day, or one entire month in a year. Time is money: and the young man who appropriates this month to the acquiring of useful knowledge, does more to add to his future fortune, to say nothing of his intellectual wealth, than if he received pay for this month and loaned it upon interest. Knowledge is in another respect like money: the greater the stock of it on hand the more it will administer to the respectability and enjoyments of life. But knowledge is not to be acquired without exertion, nor is anything else that is useful in life. It is the labor we bestow in acquiring an object that imparts to it an intrinsic value. It has been well said, that "although we may be learned by the help of others, we can never be wise but by our own wisdom." It is the humble design of this monthly sheet to excite a laudable ambition to improve the mind as well as the soil. If we succeed in awakening the latent energies of the former, we think the latter will follow as a natural consequence, and our object will be attained."

Fattening Sheep in Winter.—Keep them in a dry place, and let them have plenty of good clover hay and turnips, with half a pound of oil-cake and a pint of barley per day. Water daily. I have fattened them in this way in a short time, and I think this is the best way of fattening them in winter. Jonathan Kitson.—*Howard, C. W.*




### FAILURE OF THE FRUIT CROPS.

A few weeks since, on visiting some friends in one of the finest fruit sections of Western New York, we told them we had come to see some of their celebrated peach orchards. "Nay," said they, "but to see the nakedness of the land ye are come." And truly, these once flourishing peach orchards look as though they had been struck with a blast of barrenness. Many of the trees are dead, and on nearly all, the leaves are curled up and withered. Plum trees are so affected with black knot, that they cannot furnish fruit enough for the curculio to propagate itself in; and even the Cherry trees, hitherto healthy and fruitful, are so debilitated that the leaves curl up and the fruit is comparatively worthless.

The dry, hot summer of 1856 enabled the trees to ripen their wood so perfectly that the following severe winter injured them far less than the comparatively mild winter of 1857–8, following a cool, wet summer, which did not ripen the wood. Even the Osage Orange hedges in this section looked worse this spring than they did in the springs of 1856 and '57, after winters of unparalleled severity.

Immature wood is more to be dreaded than cold winters; and happily we can do much more to avoid the former than to lessen the severity of the latter. That which is favorable to the healthy growth of a plant is favorable to its early maturity. Superphosphate of lime has a remarkably beneficial effect on the growth of turnips, and it causes them to mature several weeks earlier than those liberally supplied with nitrogenous manures, which, while they induce an excessive growth of leaves, are not favorable to the formation of bulbs. On the other hand, nitrogenous manures are exceedingly favorable to the growth of wheat; and they increase the proportion of starch in the grain and *hasten its maturity*. We know litt'e,—in fact *nothing*, with any degree of certainty, in regard to the effect of different fertilizers on fruit trees, but it is safe to affirm that the same general principle applies to them — that anything which is favorable to their *healthy* and vigorous growth is favorable to their early maturity.

Turnips manured with an excess of ammonia will continue to grow till cut down with the frost; while those on the same soil, and sown at the same time, manured with superphosphate, will be ripe several weeks earlier. So fruit trees on some soils, abounding in organic matter, continue to grow late in the fall, and do not mature their wood. They have an abundance of food, but it is not appropriate to their healthy growth. On this account, rich, low lands are generally to be avoided.

In ninety-nine cases out of a hundred, however, fruit trees are in no danger of being injured from an excess of fertilizing matter in the soil. The danger lies in the other direction. A farmer who has a large farm half tilled, cannot be persuaded to devote a few acres *exclusively* to fruit trees. He wants a crop of grass, or grain, as well as fruit. Such a fruit-grower need have no fears that his orchard will be injured by excessive growth. Animals half starved are more liable to disease than those supplied with a sufficient quantity of appropriate food. The same is true of fruit trees. Plant them on poor soil, or rob them of their appropriate food by the growth of other crops, and they are rendered much more susceptible to disease. Their constitution is weakened, and they are less capable of withstanding cold and other adverse influences.

Farmers who are at particular pains to cultivate their corn and potatoes, often deem it unnecessary to bestow any labor on their fruit trees. One reason of this is found in that restlessness and love of change incident to a new country. We are inclined to confine our attention to those things which afford immediate results. Farmer Slapdash will give his corn good cultivation, because he can reap the profit in a few months; but to plant and cultivate trees, and wait several years for the fruit of his labors, requires a habit of thought to which he is a stranger. If seized with a sudden fit for planting, he sets out his trees in a meadow or wheat field, cuts off or mutilates several of them in mowing, and then turns in his cattle to do the pruning! The next year he will pronounce the agricultural papers, tree pedlars, and the "Rochester Nurserymen," unmitigated humbugs.

But even Farmer Forecast, who plants good trees and gives them good care and culture, is often disappointed in the results. His trees do well for a few years, and afford good crops; but a severe winter, or a succession of adverse circumstances, too often proves fatal to his hopes. Such a man deserves and receives our warmest sympathies. His loss is a public calamity. Perhaps nothing can be done to entirely prevent such losses; but much may be done to mitigate the injurious effects of adverse seasons.

We believe the primary cause of the curl of the leaf in Peaches, and the black knot in Plums, is the

*low temperature of the soil.* The leaves of a tree give off a large quantity of water. They maintain a kind of perpetual sucking action upon the stem, which is communicated to the spongelets at the extremity of the roots. If the roots are in a soil much colder than the air, they are unable to absorb sufficient water to supply that given off by the leaves; the consequence is, that the leaves curl up and die, and the fruit falls off,—or it will "shank," as grapes do when the house is much warmer than the external border.

Evaporation produces cold. Every pound of water evaporated from the soil abstracts a definite amount of heat. Plants growing in a soil evaporate much more water than would the naked soil. To cultivate other crops among fruit trees, therefore, not only robs the trees of nourishment, but reduces the temperature of the soil. But the great reason why soil is colder than the air, is owing to an excess of moisture. Heat cannot be transmitted *downward* through water. The remedy is evident. Remove the excess of water, by means of underdrains. It has been found by repeated trials that a well underdrained soil is usually about 10° warmer than one that is undrained. Prof. SCHUBLER has proved that the loss of heat caused by evaporation, in undrained lands, amounts to 11¼° to 13½°. In draining the Red Moss, near Bolton-le-Moors, Mr. PARKES found the thermometer in the drained land rose in June to 66°, while in that which was not drained it would never rise above 47°—a gain of 19°. SIMPSON says he has "frequently found the soil of a field higher in temperature from 10° to 15° than that of another field which had not been drained, though in every other respect the soils were similar." A writer in the *Quarterly Review* states that one pound of water evaporated from one thousand pounds of soil, will depress the temperature of the whole mass *ten degrees.*

A careful observer near this city, informs us that his soil this season was quite cold till about the middle of June, whereas, quite early in the spring, we had remarkably warm weather. Under such circumstances, the equilibrium between the supply of food from the roots, and the demand of the rapid growing leaves and branches, was destroyed,—the growth was unhealthy, and the trees were rendered weak and unable to resist the subsequent cold weather, and disease, loss of fruit and foliage, and, in many cases, death, ensued.

This is an extreme case, and the best means that could be employed might have been found ineffectual, but it is evident that the injury would have been less severe if the temperature of the soil had been higher. Unlike animals, plants do not generate heat; they are dependent on the soil, and it is evident that a tree absorbing sap ten or fifteen degrees warmer than another, would be far less susceptible to sudden depressions of atmospheric temperature. During cold nights, evaporation from the leaves is nearly suspended; there would consequently be little loss of heat, and in a warm soil the temperature of the tree might be much higher than the surrounding atmosphere. While, therefore, the atmospheric changes are beyond the control of the cultivator, he may do much to mitigate their injurious effects, by raising the temperature of the soil,—and this he is enabled to do by thorough underdraining, and keeping the land loose and free from weeds, grass, &c.

"But why," we are asked, "cannot peaches be raised as easily now as when the country was new?" Because the dense forests afforded shelter from the severe winds, and, like large bodies of water, served somewhat to equalize the temperature. Then roots, remaining in the ground for some years after the trees were cut down, assisted drainage. The forests and the roots are now gone, and we must resort to artificial drainage, which it is well known not only increases the temperature of the soil, but when extensively practiced has also an equalizing effect on the temperature of the air. Severe winters, and excessively dry, hot summers, are far less frequent now in England, than before the introduction of thorough drainage.

This whole subject is forcing itself upon the attention of fruit growers, and we trust these crude and hasty remarks may induce our readers to favor us with their views and experience.

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HALE'S experiments show that a sunflower, *bulk for bulk*, imbibes and perspires *seventeen times* more fresh liquor than a man, every twenty-four hours. LAWES' experiments "on the amount of water given off by plants during their growth," show that the clover on an acre that would afford two tons of hay, absorbs from the soil and gives off from its leaves 430 tons of water in 101 days, or *eight thousand six hundred pounds per day.* Those who allow clover, grass, weeds, or any other plants, to grow among their fruit trees or any cultivated crop, should not complain of drought.

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FRUIT IN NEW JERSEY.—An experienced horticulturist in Newark, N. J., writes us:—"The fruit crop here is rather a failure. I never observed Raspberries turn out so bad; they promised at one time a fair crop, but soon decayed. I tried Peabody's Strawberry, and found it a splendid fruit, large, and of fine color. However, I think Wilson's Seedling will excel all as a bearer. The Lawton Blackberry is quite an acquisition to our fruits."

## FRUIT-GROWERS' SOCIETY OF WESTERN N. YORK.

The "Spring Meeting" of this Society was held in Rochester, on the 30th and 31st days of June. The President, H. P. Norton of Brockport, occupied the chair.

The collection of fruit on the table was not as large as at some previous sessions. Strawberries, on account of the dry weather, were not as large as are usually presented, and the Cherries were only fair.

The following are the names of exhibitors:

Hooker, Farley & Co., Brighton;
E. W. Sylvester, Lyons;
Geo. Newland, Palmyra;
Jos. Duquet, ————;
Ellwanger & Barry, Rochester;
Bissell & Salter, "
C. W. Seelye, "
Mrs. M. Goodenau, "
A. Frost & Co., "
H. E. Hooker & Co., "

### STRAWBERRIES.

The subject of Strawberries was fully discussed, in answer to the question — "Which of the new American and foreign Strawberries are worthy of general or extensive cultivation — which for amateurs and which for market; the best time to plant and the best manner of cultivation, for amateur and for market gardener?"

W. B. Smith, of Syracuse, had cultivated *Longworth's Prolific*, and found it quite hardy and an abundant bearer.

Dr. Sylvester, of Lyons, stated that it was of medium size, good quality, and the plants perfectly hardy.

P. Barry thought this variety good and prolific, but might be dispensed with. He considered the *Jenny Lind* a very valuable and desirable sort, on account of its extreme earliness.

C. L. Hoag, of Lockport, considered the *Hooker* the most valuable Strawberry he ever cultivated; from a bed of them, 10 feet by 15, he had this season picked 15 quarts, and there were many more yet to be gathered—at the rate of over 150 bushels per acre. The flavor is fully equal to *Burr's New Pine*, and superior to every other variety that he knew of.

H. E. Hooker had proved the *Hooker* several years before he offered it to the public, and believed it to be superior to any other that he had ever known. The berries ripen in succession over a long space of time, which is a desirable feature for an amateur. The fruit is too soft to transport far.

G. Newland, of Palmyra, had grown the *Hooker* for one year, and from twenty-seven plants obtained a year ago he should be able to pick three bushels of fruit.

A. Pinney, of Clarkson, thought the *Hooker* one of the finest berries — would select it if obliged to grow but one. He thought the *Cushing* a good market berry.

H. E. Hooker had raised *Wilson's Seedling*, and it appeared remarkably productive — quality medium — flowers perfect — berry fine, and would bear transportation well.

E. Frost thought *Wilson's Albany* to be the most hardy and productive, but the *Hooker* far surpasses it in flavor.

W. P. Townsend, of Lockport, had cultivated the *Genesee* for several years, and thought very well of it.

H. E. Hooker had found the *Genesee* hardy, productive, and of fair quality.

Dr. Sylvester had cultivated it for six years, and found it good and quite productive.

P. Barry stated *Scott's Seedling* to be a beautiful berry—distinct in appearance, but the quality is not very good.

H. E. Hooker: *Scott's Seedling* is immensely productive, but of poor quality.

E. Frost said that *Scott's Seedling* is a great bearer and good grower — the berries of fine color.

H. E. Hooker said that the *Moyamensing* and *Pennsylvania* are good bearers. The *Crimson Cone* is superior to *Burr's New Pine* and *Hovey's Seedling*. *Burr's New Pine* is too tender.

G. Newland stated that *Hovey's Seedling* would not compare with *Crimson Cone* for profit.

Dr. Sylvester liked *Burr's New Pine* and *Hovey's Seedling* well: had never cultivated *Crimson Cone*. The *Pine* he found hardy in the most exposed localities, and it is very productive.

W. P. Townsend said the *Crimson Cone* would yield twice as much as *Hovey's Seedling* or *Burr's New Pine*.

T. G. Yeomans, of Walworth, found *Peabody's Seedling* to be not very highly flavored, but had not sufficiently tested it to be able to give an opinion.

G. Newland said that the *Peabody* is a rapid grower, flavor very good, size large; from his present experience, would think it a very good variety.

Dr. Sylvester thought it pretty good.

Geo. Ellwanger recommended *Triomphe de Gand* as one of the best foreign sorts, both for amateurs and for market. It is a beautiful large berry, firm flesh and good quality.

### CULTIVATION OF THE STRAWBERRY.

Dr. Sylvester preferred a strong soil, deeply trenched and well manured. The best time for transplanting is spring; would allow the plants to form runners until they covered the ground, and would then mark off the bed into strips and spade in alternate ones; the fresh dug ground would during the summer become filled with young plants, and the next season after bearing would dig in the spaces left the previous year, and thus continue year after year.

P. Barry thought spring the best time for transplanting. Plants cultivated in rows would produce the finest fruit; horse culture may be employed when growing for market.

H. E. Hooker, when growing for market, preferred to turn over a clover sod, and put the plants in rows four feet apart, and one foot apart in the rows. Cultivate with the horse until the runners spread, so that it is impossible to do so without destroying the plants, and then depend on the hoe. Liked very early planting, in the spring, and before the plants had made much growth.

G. Newland: Always cultivated Strawberries in rich soil; preferred spring planting; thought the

greatest crops are grown when the plants are allowed to run into a mass, although the fruit is not so large.

The discussion on Strawberries having closed, it was proposed that each person present should hand in a list of what he considered the five best varieties for market, and the five best for amateur culture. Twelve votes were cast, resulting as follows:

| For Amateurs. | | For Market. | |
|---|---|---|---|
| Hooker | 12 | Early Scarlet | 8 |
| Burr's New Pine | 7 | Crimson Cone | 7 |
| Early Scarlet | 7 | Wilson's Albany | 7 |
| Genesee | 5 | Genesee | 5 |
| Hovey's Seedling | 4 | Hooker | 4 |
| Wilson's Albany | 4 | Hovey | 4 |
| Jenny Lind | 2 | Cushing | 2 |
| McAvoy's Superior | 2 | Scott's Seedling | 2 |
| Triomphe de Gand | 2 | Iowa | 2 |
| Peabody's Seedling | 2 | Longworth's Prolific | 2 |
| Trollope's Victoria | 2 | Burr's New Pine | 2 |
| Walker | 1 | Walker | 1 |
| Crimson Cone | 1 | Cremont | 1 |
| Cushing | 1 | Peabody | 1 |
| Chilian | 1 | Triomphe de Gand | 1 |
| Richardson's Cambridge | 1 | Chilian | 1 |
| Longworth's Prolific | 1 | | |

### DISEASE OF THE CHERRY AND PEACH.

The disease of the Cherry tree, which causes the leaves to die, and in some cases also the trees, and the curl of the leaf of the Peach, were talked of at considerable length. The general opinion of the cause is, that the great severity of the winters for two or three years back has greatly enfeebled the trees, and the long continued cold east winds of the present spring have developed that weakness in the manner which we see.

### SUMMER PRUNING THE PEAR.

Mr. Townsend some nine years ago planted about 1,000 standard Pear trees, a great part being Bartletts. Spent an hour or so once a week pleasantly in the orchard examining the trees and pinching off the ends of the shoots where it seemed necessary to check the growth of any rampant shoot and secure a good form. Most of the trees came into bearing in three years. Pinching increases the tendency to produce fruit. Standard Bartletts are very apt to lose their leader. The side shoots should be pinched pack so as to secure a good leader.

Mr. Ellwanger practiced summer pruning, or pinching, to some extent. It was often of advantage in giving a desirable form to the tree, in throwing the growth where it was needed, and checking over-vigorous shoots, that otherwise would rob their neighbors of their neeeded share of nourishment.

### THE CURCULIO.

Mr. Ellwanger knew no better way to destroy the curculio and save the Plums than shaking the trees. They invariably had a good crop on their grounds, as many present knew. Early in spring spade the ground deeply; soon after the blossoms fall commence jarring the trees every day, catching the insects in a sheet. When they begin to get scarce, after a week or so, every other day will answer. Still later only jar the trees once a week, or so, to shake down the damaged fruit, and they are swept up and carried away. Two boys, who might be hired for three or four shillings a day, if engaged for a couple of weeks, could take care of an orchard of four hundred trees and ensure a crop of fruit. After this an hour or two every week would answer. The large varieties of Plums sell well, and at a high price, and would pay for this labor. He knew of no better method to destroy them or keep them in check.

C. S. Cole knew a person in the west who had a small apricot orchard of 150 trees, and by shaking the trees, as before described, he had received good crops, and they yielded him a large revenue.

### PRUNING GRAPES.

A long discussion was held in reference to the summer pruning of Grapes. With one or two exceptions, the speakers were agreed concerning the utility of summer pruning.

The Society adjourned, to meet again in Rochester at their Fall session.

## LAYING OUT A GARDEN AND ORNAMENTAL GROUNDS.

We are not unfrequently asked to give a plan for laying out a garden and ornamental grounds for a suburban or village residence. "Supposing," said a friend, "you had a piece of land, about an acre and a half to two acres in extent, on which you were about to build, how would you lay it out?—what ornamental and fruit trees would you plant, and where?—how should the kitchen garden be formed, and where should the beds of small fruits and vegetables be placed?" In reply, we present the sketch on the following page. We can not enter into the full details of carrying out such a plan, but will endeavor to give a few brief hints that may not be unacceptable.

There are but few soils that do not need underdraining. This is the first thing to be attended to. Then subsoil-plow or trench the soil two feet deep, and make it rich and mellow. Then surround the garden with a hedge.—Nothing so much adds to the appearance of a place as a properly managed hedge. It should be planted in a broad and deep border, free from the shade of any trees whatever, and kept constantly clean and mellow for a course of years, until the fence is perfected. The hedge may be formed of Osage Orange—which is of all other plants the best safeguard against intruders; or if the location will allow, of American Arbor-vitæ, which is the most beautiful, easily procured, and most tractable evergreen screen. Buckthorn or Privet bears shearing admirably well, and the first eventually makes a good defence. Three-thorn Acacia also makes a fine fence.

The ground next to the hedges may be cropped with garden vegetables, but should not be planted with trees, vines or bushes,—any of which detract from the growth and beauty of the hedge, and are themselves broken or injured by the snow-banks which accumulate in such situations.

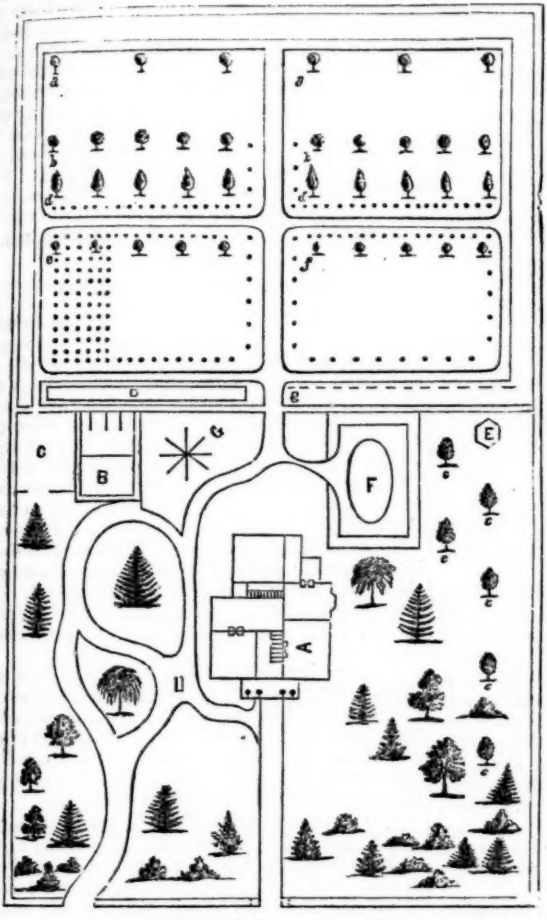
In the rear of the garden are located the larger fruit trees, among which potatoes and corn may be annually produced.

The central walk is furnished with a row of dwarf pears (on quince stocks,) on each side. Dwarf cherry and dwarf apple trees, currants and gooseberries, also fill the borders of the side and cross walks. Raspberries occupy a portion of one of the squares. Blackberries can be added, if de-

sirable. Strawberries will remain but two or three years in one place, so we do not locate them.

The grape trellis (G,) should be so situated as to have all the advantage which hot sun can give to ripen off the fruit, and the vines planted on a rich border, not burdened with much other vegetation.

The asparagus (D,) and the pie-plant should also be planted where the exposure to the sun is good, and high manuring easy.




PLAN FOR LAYING OUT A SMALL GARDEN.

The forepart of the sketch will need little explanation. A, is the house; B, the barn; C, barnyard; D, asparagus bed; E, arbor; F, flower garden; G, clothes-horse.

The location of the flower garden, arbor, and walks, the different varieties of trees for ornament, and the general style of the ornamental grounds, will of course vary much according to the means and tastes of the proprietors; but our own preference is for thick planting about the outside boundaries, and a fine lawn of moderate size, well kept, in the immediate vicinity of the house, with such thin planting near the building, as will show the entire forms and give space for the perfect development of some beautiful evergreen and weeping deciduous trees.

We are not in favor of having fruit trees on the ornamental grounds, but where the garden is small, it is sometimes allowable. Of all fruit trees, perhaps the cherry is best for this purpose. In the sketch we place six standard cherry trees, (*c*,) to the right of the house, on the lawn. They should be about thirty-two feet apart. We would recommend one each of the following varieties: Mayduke, Gov. Wood, Knight's Early Black, Yellow Spanish, Belle Magnifique, and Downer's Late.

In the kitchen garden the following trees and small fruits may be planted, leaving considerable room to spare for vegetables, and for the planting of such other fruits as the peculiar taste of the owner may require.

*a.* Six Standard Apple Trees, 32 feet apart, viz., 1 Early Harvest, 1 Early Strawberry, 1 Early Joe, 1 Porter, 1 Gravenstein, 1 Fall Pippin.

*b.* Ten Standard Peach Trees, 16 feet apart, viz., 2 Early York, 2 Crawford's Early, 2 George IV., 2 Oldmixon Free, 1 Oldmixon Cling, 1 Red Cheek Melocoton.

*d.* Ten Standard Pear Trees, 16 feet apart, viz., 1 Rostiezer, 1 Bartlett, 1 Tyson, 1 Flemish Beauty, 1 Sheldon, 1 Beurre Giffard, 1 White Doyenne, 2 Lawrence, 1 Winter Nelis.

*e.* Five Plum Trees, 16 feet apart, viz., 1 Washington, 1 McLaughlin, 1 Monroe, 1 Green Gage, 1 Smith's Orleans.

*f.* Five Dwarf Cherry, 8 feet apart, viz., 1 Belle d'Orleans, 1 Early Purple, 1 Coe's Transparent, 1 Late Duke, 1 Early Richmond.

*g.* Twelve Grape Vines, 8 feet apart, viz., 4 Isabella, 4 Diana, 1 Concord, 1 Clinton, 2 Catawba.

Seventy-two hills of Raspberries, 4 feet apart, viz., 20 Fastolff, 20 Brinckle's Orange, 20 Red Antwerp, 12 Native Black Cap. These may be planted on the left side of the lower square, as shown by the dots.

Thirty-six Currants, 4 feet apart, viz., 12 White Grape, 12 Red Dutch, 6 Cherry (or Black Naples), 6 Victoria.

Eighteen Gooseberries, 4 feet apart, viz., 4 Houghton's Seedling, 4 Whitesmith, 4 Red Warrington, 4 Crown Bob, 2 Early Sulphur.

Four Orange Quinces.

Eight Dwarf Apples, 8 feet apart, viz., 2 Red Astrachan, 1 Keswick Codlin, 1 Hawley, 1 Primate, 1 Late Strawberry, 2 Belmont.

Twenty Dwarf Pear Trees, 8 feet apart, viz., 1 Doyenne d'Ete, 1 Brandywine, 1 Summer Franc Real, 1 Beurre Giffard, 2 White Doyenne, 2 Duchesse d'Angouleme, 1 Beurre d'Anjou, 1 Beurre Diel, 2 Easter Beurre, 2 Vicar of Winkfield, 1 Glout Morceau, 2 Louise Bonne de Jersey, 1 Urbaniste, 1 Jalousie de Fontenay, 1 Belle Lucrative.

Twelve Rhubarb, viz., 4 Downing's Colossal,

1 Cahoon's Seedling, 4 Early, 1 Giant, 2 Victoria.

Six hundred Strawberry Plants, viz., 100 Hovey's Seedling, 100 Large Early Scarlet, 100 Burr's New Pine, 100 Hooker, 100 Walker, 100 Hudson.—*Rural Annual.*

## PEACH GROWING.

THE peach is very extensively cultivated in this locality, and has proved to be one of the most profitable fruits, on account of our easy access to market. Although grown in abundance, of the choicest variety — such as have been sold in the New York and Boston markets, for health and beauty, commanding an exorbitant price — the cultivation of this delicious fruit labors under many of the difficulties which are embarrassing the peach-growers of many other parts of the country. And without a knowledge of these difficulties, and the modes of propagation and cultivation, no one here ever accomplishes much in peach-growing, generally giving it up at the failure of the first trial, — being well satisfied in his own mind that the soil was not the right kind for his undertaking, which afterwards, in the hands of others, has grown heavy crops, to his surprise.

My experience in growing the peach, as regards success, has been very satisfactory, and the time I have given to its culture has been very much occupied by its careful observation and study, without which my undertaking here would have been fruitless. I have grown the peach on light sandy soil, and also on loam and that which was more clayey; but I prefer a sandy loam, in a middling state of cultivation, in order that such fertilizing material as the peach requires may be added to it, and in doing this, bring the land up to a proper state of cultivation.

In propagating the trees, I select seed from trees which are thrifty and free from disease, and prefer it from the later varieties, as they are more matured and produce the hardiest stocks, which should be inoculated with the choicest varieties, from trees free from any contamination. I am careful to select both from trees and kinds which are the best growers and bearers, as much of the profit depends on such a selection. I prefer the *Early York*, *Orange*, *Jaques Rareripe*, *Oldmixon*, *Ward's Freestone*, *Crawford's Early* and *Late*, *Melocoton*, and *Smock*, as they prove to be our most productive and best varieties for market. Some speak much in favor of *Heath's Cling*, but I oppose its culture, as it can be substituted by better varieties.

In planting an orchard, I prefer trees grown one year from the bud, that will average three and a half to five feet in height, and cut back to two and a half for the formation of the head, which must be cut back annually until it is fully formed, at the same time pruning so as to furnish the tree with a regular and constant number of bearing shoots. Trees commence bearing about the third year, and continue for six years and upwards, with the best cultivation, which is done by plowing two or three times in summer, followed by harrowing, to keep the surface mellow; no crops to be grown during this time.

The diseases which affect the peach tree are the yellows, mildew, and curl of the leaf; and they are also at times infected by an insect, (the *Algeria Exetoisa*, or Borer,) which deposits its eggs in the tender bark at the foot of the trunk, from the middle of June to the middle of September. My remedies are as follows: — For yellows, remove every tree, root and branch, as soon as you find it infected. For mildew, use a solution of one ounce of nitre to a gallon of water, apply it to the affected parts by a syringe; it tends to add vigor and health to the tree; dusting with sulphur is of less importance. For the curl of the leaf not much can be done; I believe it to be caused by a change of weather,— a cause which will often remedy itself; some say it is caused by an insect, and such use a sprinkling of soap suds: this remedy contains potash, and will do the tree much good as a fertilizing agent when applied to the soil. To remedy the borer, take a sharp knife and cut it out, once in June and again in September; it is easily found by an exudation near the crown of the roots. For these affections remedies are good, but I prefer in part the preventive, which is judicious cultivation.

*Sergeantsville, N. J.* G. H. LARISON, M. D.

## SHEEP vs. HOGS IN ORCHARDS.

No doubt, if one wishes to *cultivate* an orchard, hogs will do more of that kind of work than sheep; there "T. of Baldwinsville" and myself are at agreement. I also agree with him that hogs are the best animals for picking up fallen fruit, during the summer, and usually turn them in when the fruit begins to fall in any quantity. But my experience in *pasturing* hogs in orchards differs from his, and I am led to prefer sheep for that purpose. Let me state some particulars, in addition to those given in my communication in the June *Farmer*.

1. As to gnawing the trees. We have kept sheep in our orchard more or less for several years, and they have never injured an apple tree yet. Our hogs, on the contrary, have stripped the bark from several large trees — one of them dying in consequence.

2. As to cultivation. Our hogs have done very little at this, and can never prove a substitute for the plow and harrow, unless far more industrious. They have rooted some in the corners of the fences, and under the thickest-topped trees where little grass grew, encouraging the growth of weeds, and injuring rather than benefitting the orchard.

3. As to keeping down weeds. It is not necessary in an orchard to have the grass eaten to the root, to *compel* sheep to eat weeds, as "T." declares. I would never have any pasture eaten down close if I could help it, and generally manage to change from one pasture to another frequently, that there may always be a fair bite of grass. If sprouts come out upon the body of a tree within reach of the sheep, they will be trimmed off, and in young orchards, I do not think it would answer to pasture either sheep or swine.

4. Many farmers have orchards furnishing far more pasture than their hogs can consume. In this case calves and sheep may occupy the same field a portion of the time; for we would not mow an orchard, if it were possible to consume the grass as it grew. A thick sod, whether covered with long or short grass, does not afford the best growth to the roots of apple trees beneath it, but if kept short and well manured by sheep, it will be in a better state than otherwise.

5. As to "T.'s" hogs and plowing. If every orchard could be as well cultivated by swine as "T.'s" has been, there would be no great occasion for plowing, but they cannot be, hence plowing is generally necessary. If injury to the "*spongioles*" occurs, (we think it would not be greater from plowing, than from rooting swine, "almost equal to a subsoil plow,") perhaps new spongioles will be thrown out,—the tree will obtain more *mouths*, to feed on the added sources of nutriment—added by the decomposition of sod and manure.

"Hence we conclude" there are some advantages attending the practice of pasturing sheep in orchards, not otherwise attainable, and that the presence of swine in orchards is not in all cases productive of unmixed good to the trees.

*Niagara Co., N. Y., July, 1858.* B.

## DWARF PEAR CULTURE.

After thirteen years' experience, I am satisfied that dwarf pear culture can be made profitable; but that it requires the following conditions in order to make it so: The soil must be strong and rich, and kept in good condition by manuring. It must be well cultivated, and not laid down to grass. The trees should be planted as closely as possible —say six by twelve feet apart—and they must be pruned. If not carefully pruned once or twice each year, they will undoubtedly run to wood instead of fruit; and not only that, but their heads, instead of branching at one or two feet from the ground as they should, will be at standard height, and the trees being top heavy will be continually blowing out of the ground, requiring an infinite quantity of labor and trouble to keep them in an upright position. As Mr. IVERS well exprResses the idea, "it should be strictly a pear garden, and not a grass orchard," and in this nutshell lies much of the truth of the whole matter.

If I were now to plant a pear orchard, I should arrange the rows in quincunx order, ten feet apart, placing standards at intervals of about fifteen feet, and filling the alternate spaces with dwarfs. I would prune every one of them rigorously in pyramid form, until the standards encroached so much upon the dwarfs as to render the removal of the latter expedient, when the former might be allowed to grow more at large. In this way, I have no doubt that, by selecting varieties judiciously, a fine return would be made to the planter. JOHN B. EATON, *Buffalo, N. Y., in Horticultnrist.*

THE APPLE-TREE CATERPILLAR.—By close observation last season, I learned that the apple-tree worm, after it had arrived at its full size, left the web or nest and wandered about until it found a convenient spot, protected from the weather, when it enclosed itself and turned into a butterfly, which in its day deposits its eggs on the ends of the limbs, near the extent of the last year's growth. These eggs hatch in May into a very small worm or caterpillar, which crawls down the limb to a convenient crotch, and there forms a web—thus filling the year. On small trees, the cluster of eggs can be discovered in the winter or spring and destroyed, and no worms will appear. Look for yourselves. CYRUS AVERY.—*Camptown, Pa.*

# Ladies' Department.

## ORIGINAL DOMESTIC RECEIPTS.

[Written for the Genesee Farmer by various Correspondents.]

WAFERS.—One lb. flour, quarter lb. sugar, quarter lb. butter, three eggs.

RADISHES, served up with vinegar, are a very good substitute for cucumbers.

TEA CAKES.—Two cups sugar, two cups milk, one cup butter, one tea-spoon saleratus.

LEMON CAKE.—One and a half lbs. flour, one lb. sugar, ten eggs, two lemons—grate one peel.

RUSK.—Five lbs. flour, three and a quarter lbs. butter, one lb. sugar, one pint milk, nine eggs, and yeast.

PINT CAKE.—One pint light dough, one cup sugar, one cup butter, three eggs, one tea-spoon saleratus.

TO COOK CARROTS.—Boil them in as little water as convenient, mash them up, and season with salt, butter and pepper.

TO FRY PORK.—If salt, cut up in thin slices, and soak in cold water over night; roll in flour, and fry slowly until the flour is slightly brown, but not the pork.

POTATO YEAST.—Scald enough flour with a quart of hot water so as to make a thin batter; when lukewarm, add four boiled potatoes, mashed, and a gill of yeast.

TOMATOES, with meat, raw, should be sliced up in vinegar, salt and pepper, like cucumbers. For tea, use sweet cream and sugar: they are almost as good as strawberries.

LETTUCE, with meat, should be served with a small quantity of strong vinegar, sweetened very sweet with molasses; sugar will do, but it is not so good. For tea, instead of the vinegar, use sweet cream and sugar.

TO COOK BEANS, WITHOUT PORK.—Put them into boiling water, without soaking; change the water three times, letting them boil a few minutes each time; the third time, add salt sufficient to make them palatable, boil nearly dry, and warm up with a little fresh lard or butter.

BONNY CLABBER.—Most eastern people have a prejudice against sour milk, but let those who doubt its being good and wholesome try some fixed as follows:—Take the curdled milk when it is thick and resembles somewhat a cheese curd, and to a teacup full add a table spoonful of sugar, with nutmeg or any other seasoning, if liked. It is about equal to custard.

SWEET GREEN TOMATO PICKLES.—Peel and slice two gallons of green tomatoes, five table-spoonfuls of ground mustard, three gills of mustard seed, two table-spoonfuls of ground pepper, two table-spoonfuls of ground cinnamon, one table-spoonful of cloves, one pound of brown sugar, three quarts of vinegar. Boil all together until quite done. If one choose, they may use one spoonful ground and a portion of cinnamon bark. A little celery tops give a fine flavor. These are excellent.

### New Advertisements this Month.

Seymour's Improved Patent Grain Drill—C. H. Seymour, East Bloomfield, N. Y.

Downing's Fruits and Fruit Trees of America—Wiley & Halsted, New York.

Fruit and Ornamental Trees—T. C. Maxwell & Bro's, Geneva, Ontario Co., N. Y.

Lehigh Mountain Springs Water Cure—A. Smith, M. D., Bethlehem, Pa.

Russia or Bass Mats—D. W. Manwaring, New York.

Hand-Book of Fruit Culture—Fowler & Wells, New York.

Stocks for Nurserymen—T. C. Maxwell & Bro's, Geneva, N. Y.

Bass Bark—H. E. Hooker & Co., Rochester, N. Y.

Premium Strawberries—Wm. R. Prince & Co., Flushing, N. Y.

Strawberry Plants—C. W. Seelye, Rochester, N. Y.

Old Rochester Nursery—S. Moulson, Rochester, N. Y.

### State Fairs for 1858.

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|---|---|---|
| California, | Marysville, | August 23—28. |
| Alabama, | Montgomery, | October 18—22. |
| Connecticut, | Hartford, | October 12—15. |
| New Jersey, | Trenton, | September 14—17. |
| Ohio, | Sandusky, | September 14—17. |
| Vermont, | Burlington, | September 14—17. |
| Rhode Island, | Providence, | September 14—18. |
| Illinois, | Centralia, | September 14—18. |
| Kentucky, | Louisville, | Sept. 27—Oct. 1. |
| Canada West, | Toronto, | Sept. 27—Oct. 1. |
| Iowa, | Oscaloosa, | Sept. 28—Oct. 1. |
| Wisconsin, | Madison, | October 4—7. |
| Indiana, | Indianapolis, | October 4—9. |
| New York, | Syracuse, | October 5—8. |
| New Hampshire, | Dover, | October 6—8. |
| Tennessee, | | October. |
| Virginia, | Petersburgh, | November 2—5. |
| U. S. Ag. Society, | Richmond, Va., | October 25—30. |

To our Agents and Friends Everywhere.—As there are thousands of farmers who have discontinued the high priced papers on account of hard times, and who are not now taking any agricultural journal, we have concluded to take half-year subscriptions to the *Genesee Farmer*, and we trust our friends will make an effort to send us in a few thousand additional subscribers. We will send the *Farmer* from July to December, inclusive, to single subscribers, for 25 cents; five copies for $1,00, with a *Rural Annual* to the getter up of the club; and eight copies for $1.50, with a *Rural Annual* to the person getting up the club. All subscriptions must end with the year. We can supply the back numbers if desired.

Mr. B. Densmore, of Brockport, N. Y., writes—"On renewing acquaintance with my old friend the *Farmer*, I was so well pleased with his appearance, I took the liberty to introduce him to a few of my neighbors. It is easy getting subscribers here for the *Farmer*, and any one having the time to devote to it might make it a good business. Enclosed find $6, for *thirty-two new subscribers for the current half volume.*"

### What is said of the Genesee Farmer.

One of the most intelligent farmers in Western New York recently said to us, "I take nearly all the leading agricultural journals, but not one of them, in my estimation, comes up to the *Genesee Farmer*. It is just what farmers need—abounding in practical, common sense articles. I read no paper with so much pleasure." And a brother editor writes us, "I would like to know how you manage to get so many able correspondents, and to *cram* each number full to overflowing of valuable original articles." We have made great efforts to induce intelligent practical farmers to communicate their experience. While we are satisfied that the application of *true* scientific principles will greatly improve our agricultural and horticultural practices, we are fully convinced that no reliance can be placed on principles deduced from analyses of soils and plants. We must draw our principles from the facts developed by actual experiments or by practical experience. And it is to get such facts that we so repeatedly urge experienced farmers to write for their "own paper." Our success has far exceeded our most sanguine expectations. We have now a larger list of able and experienced correspondents than any other agricultural journal in the world. The paper is giving universal satisfaction. Its prospects for usefulness never were so bright as they are to-day. Its circulation is rapidly extending, and our cotemporaries are continually saying kind things of it and urging their readers to subscribe. We annex a few recent notices of the press.

The *Farmer* is a large and valuable publication—should be, as it is, well sustained.—*Herk. Co. Journal.*

The *Genesee Farmer* is one of the best papers in the country.—*Independent Examiner, Poughkeepsie, N. Y.*

The *Genesee Farmer* is one of the oldest, ablest, and most reliable agricultural journals in the country. No farmer should be without it.—*Burlington (Vt.) Sentinel.*

The *Genesee Farmer* has a long table of interesting contents, and is handsomely gotten up. Every farmer would profit by reading it.—*Hollidaysburg Register.*

The *Genesee Farmer* is a neat paper, of very convenient form for binding, and edited with an amount of skill and talent which recommends it to every agriculturist.—*Woodstock (N. B.) Sentinel.*

This is, we think, the oldest agricultural publication in the State. Joseph Harris, the present editor and proprietor, has made very great improvements in the *Farmer*.—*Lyons Republican, July*, 1858.

The old *Genesee Farmer*, known and esteemed by the first farmers of the land for many years back, is before us, plain, neat and substantial, such as we like to look upon.—*Penhandle Farmer, Wellsburg, Va.*

The high character of the *Genesee Farmer*, and the extremely low price at which it is furnished to subscribers, make it *the most desirable paper* within our knowledge in the United States.—*Rochester Daily American.*

The *Genesee Farmer* is one of the oldest and most successful of our agricultural publications, and our Connecticut farmers may be profited by adding it to their regular list of periodicals.—*New London (Conn.) Repository.*

A neat, tidy dress, with a choice variety of Agricultural and progressive articles for the rural inhabitants of all parts of the country, make the *Farmer* still, what it has long been, *one of the very best agricultural journals extant.*—*Western Nucleus.*

The *Genesee Former* for this month is received. We have repeatedly recommended this valuable monthly to the farmers of New Brunswick; it may be obtained for two shillings and sixpence, and every number is really worth to the agriculturist who wishes to profit by the experience and knowledge of others, double the whole year's subscription.—*Religious Intelligencer, (N. B.)*

This old and reliable agricultural work makes its appearance upon our table as regularly as the month comes round. It should be in the hands of every person who takes an interest in the raising and care of stock, or has anything to do with a farm.—*Prairie City (Ill.) Chronicle.*

The *Genesee Farmer* is one of the oldest and best established agricultural journals in the world. It is handsomely printed in pamphlet form, and is full of everything interesting to the farmer. Every number of it is a feast. Sample numbers can be seen at our office.—*Weekly Press, Centralia, Ill.*

This is one of the oldest and ablest agricultural papers in the United States. It is printed monthly, in pamphlet form, and contains 32 pages—making, at the end of each year, 324 pages of valuable agricultural matter. Price 50 cents per year. Subscriptions received at this office, where a specimen copy may be seen.—*Rensselaer (Ill.) Gaz.*

The *Genesee Farmer* should be an inmate of every farmer's dwelling. It treats of the practical affairs in husbandry, and teaches of the useful, as well as of the ornamental. The price of this journal is but fifty cents per annum. Where farmers can secure as valuable a journal as this, for the mere trifle of four shillings, and do not avail themselves of the privilege, one would think that it is almost impossible to see good crops on their farms.—*The Elevator (Pa.)*

The *Genesee Farmer*, published at Rochester, N. Y., is one of the finest agricultural papers in the country. The first article in the February number is upon natural and artificial draining, very ably written and finely illustrated by sixteen wood cuts representing the drains in the ground in their different forms. This article alone is worth the price of the *Farmer* for a year; published monthly, for 50 cents only. We recommend our farmers to procure it immediately.—*Waltham (Mass.) Sentinal.*

We have repeatedly commended this Agricultural Monthly to our readers; and we are glad to learn that an inquiry is beginning to be made for it. Several copies have been ordered by us for parties in the country. At the request of the publisher, we have consented to act as agent for the *Farmer* for the current year. The low price at which it comes, and the valuable articles on agriculture, &c., which it contains, ought to commend it to the patronage of New Brunswick farmers generally.—*Religious Intelligencer, St. Johns, N. B.*

It is the opinion of persons well qualified to give a critical and reliable opinion, that the *Genesee Farmer* was never before so well conducted and worthy the attention of those for whose especial behoof it is published; and that, all will admit, is very high praise. The variety of topics, and the experience and ability brought into their discussion, are distinguishing features. Mr. Harris is an accomplished practical agricultural chemist, who has enjoyed unusual advantages for the acquisition of a thorough knowledge of his science. We commend the *Farmer* to all who cultivate a rood of ground in country, village or city.—*Rochester Dem., July 22, 1858.*

One of the most noticeable features of the *Genesee Farmer* is the great number of communications received from experienced farmers and fruit-growers in all parts of the United States and Canada. Each number contains nearly fifty such communications. They add greatly to the interest and value of the paper. There is another novel feature in the *Farmer*. If any of the readers of the paper desire information on any particular subject—as for instance on the cultivation of wheat—the editor offers a prize of a dollar book for the best essay on this subject. *One hundred and fifty-eight* prize essays have already been published in the *Farmer*. This plan of calling out the experience of farmers and fruit-growers originated with Mr. Harris. It has proved a great success—*it has more than doubled the circulation of the paper.*

The *Genesee Farmer* is now in its twenty-eighth year. Published in one of the finest wheat and fruit-growing sections in the country, it has always enjoyed an extensive circulation, not only in Western New York, but throughout the Western, Eastern and Southern States. The publisher informs us that it has now subscribers in every State and Territory, in all the British Provinces, (it has over two thousand in Canada West alone,) in England, Ireland, Scotland, and the Sandwich Islands. *Such a paper is a credit to our city.* Long may it wave.—*Rochester (N. Y.) Democrat & American.*

American Pomological Society.—The Seventh Session of this National Institution will commence at Mozart Hall, 663 Broadway, in the City of New York, on Tuesday, the 14th day of September next, at 10 o'clock A. M., and will be continued for several successive days.

Among the objects of the meeting are the following: To bring together the most distinguished Pomologists of our land, and, by a free interchange of experience, to collect and diffuse such researches and discoveries as have been recently made in the science of Pomology—to hear Reports of the various State Committees and other district associations—to revise and enlarge the Society's catalogue of Fruits—to assist in determining the synonyms by which the same fruit is known in America or Europe—to ascertain the relative value of varieties in different parts of our country—what are suitable for particular localities—what new sorts give promise of being worthy of dissemination—what are adapted to general cultivation; and, especially, to concert measures for the further advancement of the art and science of Pomology.

The remarkable and gratifying progress which has recently been made in this branch of rural industry, is in no small degree attributable to the establishment and salutary influence of our Horticultural and Pomological Societies, the proceedings of which have been widely promulgated by the Press. A great work has been already performed, but a greater still remains to be accomplished. It is, therefore, desirable that every State and Territory of the Union and the Provinces of British America should be ably and fully represented in this Convention, and the Pomological, Horticultural, and Agricultural Societies, within these limits, are hereby requested to send such number of delegates as they may deem expedient. Nurserymen, Fruit growers, and all others especially interested in Pomology, are also invited to be present, and to participate in the deliberations of the meeting.

Held as this Assembly will be, in the great commercial emporium of our country, easily accessible from all parts of this continent, and at the same time when the Convention of the Agricultural Press will be in session, it is anticipated that the attendance will be larger than on any former occasion, and the beneficial results proportionably increased.

In order to increase as much as possible the utility of the occasion, and to facilitate business, members and delegates are requested to forward specimens of fruits grown in their respective districts, and esteemed worthy of notice; also, papers descriptive of their mode of cultivation—of diseases and insects injurious to vegetation—of remedies for the same, and to communicate whatever may aid in promoting the objects of the meeting. Each contributor is requested to make out a complete list of his specimens, and present the same with his fruits, that a report of all the varieties entered may be submitted to the meeting as soon as practicable after its organization.

For the purpose of eliciting the most reliable information, the several Fruit Committees of States, and other local associations, are requested to forward to Hon. Samuel Walker, General Chairman of the Fruit Committee, Roxbury, Mass., or to P. Barry, Esq., Secretary of the Society, Rochester, N. Y., a definite answer to each of the following questions, at an early date, and prior to September 1st:

What *six*, *twelve* and *twenty* varieties of the Apple are best adapted to a family orchard of *one hundred* trees, and how many of each sort should it contain? What varieties, and how many of each, are best for an orchard of *one thousand* trees, designed to bear fruit for the market?

What *six* and *twelve* varieties of the Pear are best for family use on the Pear stock? What varieties on the Quince stock? What varieties, and how many of each of these, are best adapted to a Pear orchard of *one hundred* or of *one thousand* trees?

What are the *six* and *twelve* best varieties of the Peach for a family orchard? What are the best varieties, and how many of each, are best adapted to a Peach orchard of *one hundred* or of *one thousand* trees?

Answers to these questions should be made from reliable experience, and with reference to the proximity or remoteness of the market.

Societies will please transmit to the Secretary at an early day a list of the Delegates they have appointed.

Gentlemen desirous of becoming members can remit the admission fee to Thomas P. James, Esq., Treasurer, Philadelphia, who will furnish them with the Transactions

of the Society. Life Membership, twenty dollars; Biennial, two dollars.

Packages of Fruits may be addressed to Wm. S. Carpenter, Esq., 468 Pearl street, N. Y.

MARSHALL P. WILDER, President,
*Boston, Mass.*

P. Barry, Secretary, *Rochester, N. Y.*
*July* 1, 1858.

Illinois May or June Wheat.—John Z. Reed, Esq., of Avon, N. Y., brought a variety of bald wheat last year from Southern Illinois, and sowed half an acre with it Mr. Dorr, of Scottsville writes us that it proves to be "four or five days earlier than the *Mediterranean*, and equal in quality to the *Soules*, but not so productive. In Southern Illinois it yields from 20 to 30 bushels per acre, on land that would yield 30 to 40 bushels of *Soules*." The half acre sown by Mr. Reed escaped the midge almost entirely, and he is so well pleased with it that he has sent to Illinois for 100 sacks. It is called the May or June wheat. There appears to be two kinds—the red and the white chaff. It was sown the 20th of September. Do any of our readers know anything in regard to it.

It is not too Late to Subscribe.—Our friends have responded most nobly to our request to obtain subscribers to the present half volume of the *Farmer*. Many have sent in large clubs, and several hundred have got up clubs of five and eight. We trust our friends will not cease their efforts. Never was there a better time for them to introduce the paper. Thousands of farmers are now taking no agricultural paper, and none are so poor as to be unable to raise twenty-five cents. Speak to them at once. It is not too late. Harvest is pretty much over, and the leisure season is rapidly approaching. Farmers will have more time to read, and they will not regret if you persuade them to try the "Farmers' Own Paper" for six months. See terms in another column.

Wheat Midge in Canada.—Our correspondent, Mr. S. King, informs us that in the Niagara District, and near London, C. W., the midge has so affected the wheat that many farmers have cut it for fodder.

Our friends who have sent us one dollar for five copies of the present half volume of the *Farmer*, can have three more copies for fifty cents, and any additional number at 18½ cents each.

Seymour's Grain Drill.—We would call particular attention to the advertisement of this valuable grain drill. We believe there is no better drill manufactured in this country.

## Inquiries and Answers.

1. How is the Verbena impregnated? 2. Is there any particular method of impregnating the Carnation, to make it seed well? Lewis J. Elliott.—*Kewanee, Ill.*

1. By itself.

2. The following method of raising Carnation seed is recommended by Maddock:—"Those flowers which have but few petals, or, as it is more commonly expressed, are thin of leaf, generally produce most seed; but they should be possessed of the best properties in other respects, viz: their petals should be large, broad, substantial, and perfectly entire at the edge, and their colors rich and regularly distributed, and in due proportion, throughout the whole blossom. The plants should be selected from the rest, and their pots should stand upon a stage, defended from earwigs, in an open part of the garden, in which situation they should remain during bloom, and until the seed is perfectly matured; their blossoms should be defended from rain, by having glass, paper, or tin covers suspended over them, in such a manner as to admit a free circulation of air; the pots should neither be kept very wet nor very dry; nor will it be proper to cut and mutilate the plants, either for their layers or pipings, till the seed becomes ripe, because it would certainly weaken them, and consequently injure, if not destroy, their seed. When the bloom is over, and the petals become withered and dry, they should be carefully drawn out of the pod or calyx, being apt to retain a degree of moisture at their base, endangering a mouldiness and decay in that part, which will destroy the seed."

Cherries from Seed.—1. Can you, or some of your numerous correspondents, inform me, through the columns of the *Genesee Farmer*, how to raise Cherry trees from the seed? I planted seed for several years, but none came up. 2. Will trees raised from the seed produce the same kind of Cherries as does the parent stock? Particulars on this subject would be thankfully received by several of your subscribers. Daniel Dull.—*Gebharts, Pa.*

1. Plant the seeds when ripe, or keep them in moist sand and plant in the fall, in light land.

2. No. Varieties of fruit trees cannot be perpetuated by seed.

Can you, or any of the subscribers of the *Farmer*, inform me what is the best mode to make an underdrain with brushwood? Also, the proportion of lime to gravel, &c., used in building a stable with grout? J. W.—*Camden, N. J.*

## Notices of Books, Pamphlets, &c.

The Farm: A Pocket Manual of Practical Agriculture; or How to Cultivate all the Field Crops. Embracing an Exposition of the Nature and Action of Soils and Manures; the Principles of Rotation in Cropping, Directions for Irrigation, Draining, Subsoiling, Fencing, Planting Hedges, etc.; Descriptions of Improved Agricultural Implements: Instructions in the Cultivation of the various Farm Crops; How to Plant and Cultivate Orchards, etc. With a most valuable Essay on Farm Management. By the author of "How to Behave," "How to do Business," "The Garden," etc. New York: Fowler & Wells. 1858. Price, post-paid, in paper, 30 cents; in muslin, 50 cents.

We have read this work with great pleasure, and can safely say that it is the cheapest, and, for the price, the *best* work of the kind published. The essay on Farm Management, by J. J. Thomas—here reprinted by the permission of the author—is alone worth the price of the book. It is a hopeful indication of progress, that such works as this meet with so extensive a sale that they can be afforded at little more than the cost of the paper on which they are printed. The series of four "Rural Hand Books" to which this belongs—"The House," "The Garden," "The Farm," and "Domestic Animals,"—are sent to those ordering them all at the same time for $1.

In speaking thus highly of "The Farm," we would not be understood as endorsing all its statements. It is compiled from a variety of sources, and generally with good judgment, but on some points the compiler does not sufficiently discriminate between plausible speculations and well established facts. Sometimes, too, though the facts are correctly stated, the principles deduced from them are at fault. Take the following as examples:

"The manure of any animal is richer than the food given to it, because it contains, in addition to the residue

of the food, certain particles belonging to the body of the animal."

That manure is richer in certain elements than the food eaten by the animals, is true; but it is so simply from the fact that the carbon is consumed by the animals, while nearly all the nitrogen and other elements are found in the excrements. After the carbon is removed, the *proportion* of the others is increased. Nothing is added. A lump of ore containing gold, silver, lead and iron, would become "richer" by abstracting a portion of the lead and iron. And in the same way food is made richer by passing through an animal. A portion of those elements of least value as manure are abstracted, while nearly all the more valuable elements remain. They are also rendered more readily available as food for plants.

On the authority of the late Prof. NORTON, it is recommended to mix "ashes" with superphosphate of lime, for the purpose of drying it. This is an English practice; but the ashes used are *coal* ashes. *Wood* ashes would be quite injurious.

"Potash, lime, and phosphoric acid, enter largely into the composition of the grain of wheat, and both lime and silicia abound in the straw; *for this reason*, rich vegetable soils generally, being deficient in these elements, are not well adapted to wheat."

If this is the "*reason*," why is it that these soils are well adapted to Indian corn, which contains as much of the elements named as wheat?

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PEAR CULTURE. A Manual for the Propagation, Planting, Cultivation and Management of the Pear Tree. By THOS. W. FIELD. New York. A. O. MOORE. 1858.

Mr. FIELD is an intelligent and experienced cultivator of the Pear. The public are indebted to his love of the subject, for a most complete and instructive manual. He commences with the first step in the growth of the Pear, and carefully follows up the process to the final gathering and ripening of the fruit. His teachings are sound, practical and reliable. While the practiced cultivator will find much in the work to interest and instruct him, it will be found particularly useful to the novice.

Pear culture in this country is yet in its infancy. We have much to learn, and we have also much to unlearn, before we shall attain the perfection to which culturists in the old world have arrived. We need just the sort of instruction which Mr. FIELD has given us in this work, to correct our errors and increase our knowledge. Our climate and soil are as well adapted to the growth of the Pear, as the soil and climate of France. There is doubtless a difference, but in some respects the difference is in our favor. If we persevere, we shall be able to grow this delicious fruit as easily and in as much perfection as the French.

We heartily commend the book to all who desire reliable and really practical information on the subject.

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SOIL CULTURE; Containing a comprehensive view of Agriculture, Horticulture, Pomology, Domestic Animals, Rural Economy, and Agricultural Literature. By J. WALDEN, A. M. Illustrated by numerous Engravings. New York. B F. CHAPPELL & Co. 1858.

A handsome book of 450 pages, containing a vast amount of useful information on the various branches of "Soil Culture." The chief fault of the author is that he has attempted too much, and this has led him into some strange errors. We extract a few, which we hope to see corrected in subsequent editions—for the work is one well calculated to be popular.

"The best varieties [of Apricots] produce their like from the seed."

"Propagation [of the *Lawton* Blackberry] is by the offshoots from the roots, *or by seeds*."

"The tile is not so good as stones; it is so tight that water does not enter it so readily."

Such statements as these greatly detract from the usefulness of the book,—though they will not mislead any intelligent reader.

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HISTORICAL AND LEGAL EXAMINATION of that part of the Decision of the Supreme Court of the United States in the DRED SCOTT CASE, which declares the Unconstitutionality of the Missouri Compromise Act, and the Self-Extension of the Constitution to the Territories, carrying Slavery along with it. With an Adpendix, containing:—1. The Debate in the Senate, in March, 1849, between Mr. WEBSTER and Mr. CALHOUN, on the Legislative Extension of the Constitution to Territories, as contained in Vol. II. Ch. CLXXXII. of the "Thirty Years' View."—2. The Inside View of the Southern Sentiment in relation to the Wilmot Proviso, as seen in Vol. II. Ch. CLXVIII. of the "Thirty Years' View."—3. Review of President Pierce's Annual Message to Congress, of December, 1856, so far as it relates to the Abrogation of the Missouri Compromise Act and the Classification of Parties. By the Author of the "Thirty Years's View." New York. D. APPLETON & Co. 1858.

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A CYCLOPEDIA OF COMMERCE AND COMMERCIAL NAVIGATION. Edited by J. SMITH HOMANS, Corresponding Secretary of the Chamber of Commerce of the State of New York, and editor of "The Banker's Magazine and Statistical Register," and by J. SMITH HOMANS, Jr., B. S., author of an "Historical and Statistical Sketch of the Foreign Commerce of the United States." With Maps and Engravings. New York. HARPER & BRO. 1858.

This is an exceedingly valuable work, which we shall notice more at length in a future number.

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ELEMENTARY GERMAN READER, on the Plan of Jacobs' Greek Reader; with a full Vocabulary. Composed, Compiled and Arranged Systematically by Rev. L. W. HYDENREICH, Graduate of the University of France, and Professor of Languages in the Moravian Female Seminary at Bethlehem, Pa. New York. D. APPLETON & Co. 1858.

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THE HISTORY OF MINNESOTA: From the Earliest French Explorations to the Present Time. By EDWARD DUFFIELD NEAL, Secretary of the Minnesota Historical Society. Philadelphia. J. B. LIPPINCOTT & Co. 1858.

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TEXAS: Her Resources and Her Public Men. A Companion for J. De Cordava's New and Correct Map of the State of Texas. By J. DE CORDOVA. Philadelphia. J. B. LIPPINCOTT & Co. 1858.


## ADVERTISEMENTS,

To secure insertion in the FARMER, must be received as early as the 10th of the previous month, and be of such a character as to be of interest to farmers. TERMS—Two Dollars for every hundred words, each insertion, PAID IN ADVANCE.

**STRAWBERRY PLANTS.**—All of the most approved varieties for sale at the Rochester Central Nurseries. Catalogues sent free on application to C. W. SEELYE.
August, 1858—2t Rochester, N. Y.

**RUSSIA OR BASS MATS**—Selected expressly for budding and tying. GUNNY BAGS, TWINES, &c., suitable for Nursery purposes, for sale in lots to suit, by
D. W. MANWARING, Importer.
August, 1858.—1y 248 Front street, New York.

**AT THE OLD ROCHESTER NURSERY**—which now covers over two hundred acres of land, and where the stock is doubly as extensive as in former years, may be found an assortment consisting of a very extensive and select variety of FRUIT AND ORNAMENTAL TREES that are hardy and have been grown with much care as to selectness of sorts, extent of variety and size to give entire satisfaction.

Parties desiring Nursery Stock, are especially solicited to write the subscriber, who will promptly reply to all communications, and all ordering may rely on receiving every possible care and attention in the execution of their orders, which can be filled to an almost unlimited extent.

An exact inventory of the Stock published semi-annually and forwarded to all applicants inclosing a stamp for pre-payment. Also a Wholesale Trade List for Nurserymen and Dealers.
S. MOULSON, 10 Front st.,
August, 1858.—1t Rochester, N. Y.

"Altogether the vade mecum of this country."—*Hort.*

THE NEW REVISED EDITION
OF
## DOWNING'S FRUITS AND FRUIT TREES OF AMERICA,
OR THE CULTURE, PROPAGATION, AND MANAGEMENT IN THE GARDEN AND ORCHARD, OF FRUIT TREES GENERALLY, WITH DESCRIPTIONS OF ALL THE FINEST VARIETIES OF FRUIT, NATIVE AND FOREIGN, CULTIVATED IN THIS COUNTRY.

BY A. J. DOWNING.

REVISED, CORRECTED, AND GREATLY ENLARGED BY

CHARLES DOWNING.

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THIS edition is intended to furnish a complete manual of American Pomology, and contains as far as can at present be ascertained the character and habits of all the important fruits of every district of the country.

It has been prepared by Charles Downing, whose personal knowledge of most of the different varieties which are grown in various sections of our country, has peculiarly fitted him for giving a reliable estimate of the value of the different varieties, as well as accurate descriptions. The errors of the former editions have been corrected, and although nothing has been omitted, the additions have been so great as to give it almost the character of a new work. For instance, the last former addition contained, of apples, about 170 kinds, the present, over 600; of pears, 230, the present, 560; and of other fruits, many kinds have been added.

The descriptions, although concise, are remarkable for their systematic accuracy; but the feature which gives greatest value to the book, in addition to its comprehensiveness, is the classification by which the relative merits of all the fruits are so clearly indicated as to be seen at a glance.

### Notices of the Press.

"Downing's Fruits and Fruit Trees of America occupies the very first rank among the numerous treatises on American Pomology."—*Genesee Farmer.*

"This book is, therefore, in our opinion, the very best work on Fruits that we have."—*American Agriculturist.*

"We hail the present work as the best American Fruit Book extant."—*Ohio Cultivator.*

"Altogether the vade mecum of this country—indispensable to the Fruit Grower, and invaluable to the Amateur.—*Horticult'st.*

"No man who has a plot of 50 feet square should be without this book, while to the owner of acres it is beyond all price."—*Newburgh Gazette.*

"The remarks of the author on the subject of Peach Trees are corroborated by our own experience. We believe the suggestions made on this subject alone would be worth to many of our countrymen ten times the value of the book itself."—*N. Y. Evangelist.*

"A deliberate examination of the work enables us to say, without hesitation, that it is by far the greatest acquisition placed within the reach of American Cultivators of Fruit that has ever appeared."—*Cultivator.* (Notice of first edition.)

WILEY & HALSTEAD, 351 Broadway, N. Y.

☞ Copies will be mailed to any address, and prepaid, on the receipt of the price. Clubs and Societies will be supplied with the work for Premiums, at a discount.

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## FRUIT AND ORNAMENTAL TREES.

WE offer for sale, the coming fall, a large and fine assortment of

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| APPLE TREES, | 3 and 4 years, stocky and healthy. | |
| PEAR | " | Standard and Dwarf, 2 and 3 years, very fine. |
| " | " | Dwarf, 1 year, *superb*, and *very cheap* in large quantities. |
| CHERRY | " | St'd & Dw'f, 2 years, hardy sorts and *strong.* |
| PLUM | " | 2 years, on Plum stock. |
| PEACH | " | 1 and 2 years, handsome. |

APRICOTS, ORANGE QUINCE, GRAPES, &c., &c.

CURRANTS, GOOSEBERRIES, RASPBERRIES, BLACKBERRIES, STRAWBERRIES, RHUBARB, &c.

HORSE CHESTNUT, MOUNTAIN ASH, LINDENS, MAPLES, AMERICAN and EUROPEAN ASH, AMERICAN CHESTNUT, SHRUBS, ROSES, &c.

Also, a fine stock of BALSAM FIR, NORWAY SPRUCE, AMERICAN ARBOR VITÆ, and a general assortment of other Nursery articles.

Nurserymen, Dealers, and Planters, are invited to call.

Orders promptly attended to.

Descriptive and Wholesale Catalogues furnished.

T. C. MAXWELL & BRO'S.

Geneva, Ontario county, N. Y., August 1, 1858.—2t

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## LEHIGH MOUNTAIN SPRINGS WATER CURE.

ALL diseases are cureable with Water, Air, and Diet, at this celebrated Institution. Beautiful scenery, pleasant drives, walks, and rowing connected with the Cure. Address

August, 1858.—1t* A. SMITH, M. D., Bethlehem, Pa.

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## DELANO'S INDEPENDENT TOOTH HAY AND GRAIN RAKE.

THIS Rake has given universal satisfaction wherever it has been introduced. The ease and facility with which the hay may be placed in winrows, or bunched or cocked preparatory to loading, with entire freedom from dust; its superiority as a gleaner; the adaptation of the teeth to all surfaces, however irregular; are qualities which commend the Delano Rake, and must ultimately bring it into exclusive use. In short, it is as greatly superior to the revolver or any other, as the revolver was, when first introduced, to the hand rake. We know of farmers who harvest their entire crop of hay by the use of the Delano Rake and the fork alone, no hand rake being needed in the field. Price, complete, $25.

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## SELF-ADJUSTING HAY ELEVATOR, or Hoisting Fork.

By the use of this simple and low-priced apparatus, a two-horse wagon-load may be unloaded and deposited in the mow, just where it is needed, within ten minutes; and if unusual exertion be made, to avoid a threatened storm, in half that time, the workmen being fresh and ready for re-loading.

Those manufactured by us are of improved construction. We also manufacture the Anti-Friction Blocks to accompany the Forks. As these Blocks can not take fire, they are therefore *cheaper* than the common low-priced blocks.

Price of Hay Elevator, $8; Anti-Friction Blocks, $5 per set.

Manufactured and for sale by
D. LANDRETH & SON, Agricultural Warehouse,
Nos. 21 & 23 South Sixth St., Philadelphia.

LANDRETH'S RURAL REGISTER AND ALMANAC, published annually, containing a monthly calendar for the Farm, Garden and Greenhouse, *furnished gratis to all applicants.*
July, 1858.—2t.

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## U. S. TENT AND FLAG MANUFACTORY, No. 12 Buffalo St., Rochester, N. Y.

HAVING purchased the entire stock of Tents and Flags formerly owned by E. C. Williams, I am prepared to rent the same at reasonable rates, for Agricultural Fairs, Military Encampments, Camp Meetings, Conferences, &c., &c.

I will also manufacture, on short notice, Tents, Flags, Awnings, Bags, and everything pertaining to this branch of business.

Address JAMES FIELD,
July, 1858.—3t* Box 701, Rochester, N. Y.

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## ALBANY TILE WORKS.

**Corner Clinton Avenue and Knox Sts., Albany, N.Y.**

THE SUBSCRIBERS, being the most extensive manufacturers of Draining Tile in the United States, have on hand, in large or small quantities, for Land Draining, Sole and Horse-shoe Tile, warranted superior to any made in this country, hard burned, and over one foot in length. Orders solicited. Cartage free.

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DAMA & Co., Agents, Utica.
JAS. WALKER & Co., Agents, Schenectady. April—6

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## NURSERYMEN, FLORISTS, AND AGRICULTURISTS,

PAUL BOSSANGE, Agent for LOUIS LEROY, of the GRAND JARDIN, Angers, France, begs to announce that he is now fully prepared to execute all orders for Fruit, Forest, and Ornamental Trees, Shrubs, Flowers, &c.

Catalogues of the prices current, embracing shipping and insurance charges, and all other needful information, may be had (gratis) on application to PAUL BOSSANGE,
June, 1858.—4t. 20 Beekman street, New York.

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## FOR SALE.

THE Short-Horned Durham Bull "Frank," bred by I. F. Sheafe, Esq., New Hamburg, Dutchess county, N.Y. He was three years old last April, is from a good milking stock, has proved a good stock getter, and would be a valuable animal to cross with native cows. As we have no further use for him, he will be sold at a bargain. For further particulars, apply to
July—2t C. N. BEMENT, Springside, Po'keepsie, N. Y.

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## A. LONGETT,

No. 34 CLIFF STREET, NEW YORK,

DEALER in Peruvian, Colombian and Mexican Guano, Superphosphate of Lime, and Bone Dust.
November 1, 1857.—1y.

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**5,000 AGENTS WANTED**—To sell four new inventions. Agents have made over $25,000 on one,—better than all other similar agencies. Send four stamps and get 80 page particulars, gratis. EPHRAIM BROWN, Lowell, Mass.
July, 1858.—3t*

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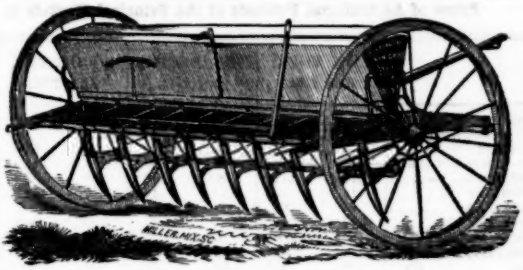
**1,000 AGENTS WANTED.**—For particulars, send stamp. 1y 3t* C. P. WHITTEN, Lowell, Mass.

SEYMOUR'S IMPROVED PATENT

# GRAIN DRILL.

## The simplest, best, and most durable Drill, EVER OFFERED TO THE PUBLIC.

[Patented by Pierpont Seymour, East Bloomfield, N. Y., September, 1849, and 1855.



EACH year more and more fully proves the great value of drilling. We point with confidence to every neighborhood where wheat has been drilled, in confirmation of this fact.

Drills, of different kinds and of different merits, have been in use for many years, and we triumphantly point to the notorious fact that, wherever they have been introduced, *there* their value is so well established that the practice of drilling becomes almost if not entirely universal.

Our Drill has been in use many years, in several States and in Canada, and is now used in more than half the States in the Union, and dealers in agricultural implements send them to *foreign countries* when the best Drill in America is ordered.

This Drill embodies in itself all the valuable qualities of all the Drills in use, and it possesses several not found in any other. Hence we claim that it is the CHEAPEST as well as the BEST GRAIN DRILL IN THE WORLD. In proof of this strong assertion, we give the following:

Extract from the Report of the Hon. B. P. Johnson, Secretary of the N. Y. State Ag. Society, who was the Agent of the State of New York appointed to attend the Exhibition of the Industry of all Nations, held in London:

"There were various Drill Machines, very perfect in their construction and management, yet too complicated and expensive for introduction into this country. They do not possess any material advantages over our own Drills, which are afforded at one-third the price of the best English Drills."

Extract of a letter from Mr. Brewer, of Oneida county:

"Mr. Seymour—*Dear Sir:*—I inquired of the Hon. B. P. Johnson, Secretary of the N. Y. State Ag. Society, where I could get the best Grain Drill, and he directed me to you. You will therefore please send me one," &c.

Extract from the Report of the Committee appointed by the Agricultural Society of Westchester county, N. Y., to visit the State Fair, held in New York city, in 1854:—

"Of Grain Drills, there were several on exhibition; but, in the opinion of your Committee, Seymour's was far superior to the others. HENRY KEELER, Chairman."

The following is from the pen of Sanford Howard, Esq., Editor of the Boston Cultivator:

"The writer, by serving on committees, and otherwise, has had opportunities of examining various kinds of Drills. One of the best is made by P. Seymour, of East Bloomfield, Ontario county, N. Y." Mr. Henry Keeler, of South Salem, N. Y., says, in the "Country Gentleman," that he "has used one on rough land, and is satisfied it will work well on any land that a Geddes (or hinge) Harrow will. He further says: "I have turned out stones as large as two men could lift, without injuring the Drill in the least."

This Machine is capable of sowing all coarse grain and all fine seed commonly sown by farmers, from corn and peas down to the smallest seed, such as clover, timothy, and other grass seeds, either broadcast or in drills; and, while it is the best drill for wheat, rye, oats, barley, &c., it is just the thing to drill in fine dry fertilizers before putting in the seed, or these fertilizers may be mixed with the seed, and all deposited in the ground together.

Its reputation has been in advance of all other Drills, for the last six years, in the State of New York, and it has six times taken the first prize bestowed on Grain Drills, by the Agricultural Society of this State, including the highest prize and diploma at the great trial of implements made by that Society, at Geneva, in 1852. It is one of the most simple in its construction and machinery, as well as the most convenient and durable of all Drills, and, without disparaging others, it is believed to be better adapted to the various purposes for which such a machine is wanted, than any other implement known in America: and its value is greatly increased from the fact that it is converted into a Broadcast Sowing Machine, merely by removing the drill teeth and connecting tubes, which can easily be done in five minutes.

A recent improvement, which prevents the shrinking and swelling of the wood from affecting the correctness of its operation, also adds much to its value.

The machinery is remarkably simple, permanent, and easily kept in repair, and all the parts are so clearly presented to the view of the operator, that he can readily see if anything is not correct. The grain falls from the seed-box to the tubes, (a space of several inches,) in full view, so that in passing over a field he may be constantly assured that the seed is deposited as designed.

### DOUBLE RANKED DRILL.

The teeth are all placed in one rank, unless ordered to be put in two ranks. It is believed by those who have made experiments and given the subject their careful attention, that the evils caused by lumps, stones, etc., being thrown by the teeth in the hind rank into the furrows made by the teeth in the front rank, are, in most cases, far greater than the advantages gained. Still, on prairie land, and other similar land, where there are no lumps, but where weeds, grass, stubble, etc., are plowed in, and not turned under deep enough to clear the drill points, it may be an object to place the teeth in two ranks. These considerations have induced the inventor to construct his double-ranked Drill so that the teeth can all be placed in one rank at pleasure, *thus obviating in this Drill* the objection to all other two ranked Drills. The price of the Drill with teeth in two ranks is five dollars higher than those with teeth in but one rank. They are usually made with nine teeth eight inches apart, sowing just six feet wide. The wheels are high, and the draught so light for a team that those with only seven teeth are now seldom ordered, while there is an increasing demand for those with eleven teeth; and a still larger size, with thirteen teeth, is now being called for by prairie farmers, and those who have large and level farms.

If required to sow plaster or any other fertilizer, a "Feeder" should be added, for these are very apt to be damp, and if slightly damp the "feeder" is useful. Although the Drill is capable of sowing grass seed broad-cast, yet, if required to sow grass seed *while drilling* any other seed or grain (or while sowing any other seed or grain broad-cast,) a light broad-cast "Seeder" is added, with which any seed, from wheat to the smallest seed, can be sown in front of the drill teeth, and is slightly covered by them. Clover and timothy mixed are as readily sown with this as either alone.

### DRILL WITH GUANO ATTACHMENT.

This Drill, with Seymour's Guano Attachment, is another form of the same Drill, with a double box, and is expressly intended to meet the wants of those who wish to drill fine fertilizers into the ground with the grain, but prefer to keep such fertilizers in separate compartments till discharged from the box, when both seed and fertilizers will pass together through the same drill tubes into the ground.

### ONE HORSE DRILL, FOR DRILLING AMONG STANDING CORN.

Still another form of this Drill is constructed for *one horse*, and is completely adapted to working *between the rows of standing corn*, yet it will work on any other land as well as among corn; and though light enough for *one horse*, a light pole or tongue is readily attached, that two may be used if desired. It is made with six teeth eight inches apart, making it just right for working between the rows of corn four feet or four feet and three or four inches apart. Though this is thought to be the most desirable size, it may be made any other size, to order. (Corn three feet four inches to three feet eight inches apart, would require one with only five teeth.) It sows six rows of wheat (or any other grain or seed, not excepting *beet or carrot* seed,) eight inches apart. Or, if any wish to try the experiment, the conducting tubes may be removed, and the seed allowed to fall *broad-cast* upon the ground in front of the drill teeth, and the teeth will effectually serve as a harrow or cultivator to cover the seed. It will sow within four inches of the standing corn.

By examining the following list, the purchaser can determine which he will order:—

| | |
|---|---|
| Drill with 6 teeth, for drilling among corn, | $75 |
| Drill with 9 teeth, | 90 |
| Drill with 9 teeth and "Feeder," | 95 |
| Drill with 9 teeth and "Grass Seeder," | 105 |
| Drill with 9 teeth, "Grass Seeder," and "Feeder," | 111 |
| Drill with 11 teeth, | 100 |
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Printed directions for using accompany each Machine. Those who wish any other information, will please address

C. H. SEYMOUR,
August, 1858.—1t East Bloomfield, Ontario Co., N. Y.

**Prices of Agricultural Products at the Principal Markets in the United States, Canada and England.**

| | NEW YORK, July 27th. | | PHILADELP'IA, July 27th. | | ROCHESTER, July 27th. | | CHICAGO, July 20th. | | TORONTO, July 26th. | | LONDON, ENG., July 12th | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Beef, per 100 lbs., | | | | | $4.50 @ | $6.00 | $2 00 @ | $3.45 | $4 50 @ | $6.00 | $8.25 @ | $15.00 |
| do mess, per bbl., | $10.50 @ | $11.50 | $15.00 @ | $17.00 | | | | | | | | |
| Pork, per 100 lbs., | | | | | 5.00 | 6.00 | 4.25 | 4.40 | | | 10 50 | 15.00 |
| do mess, per bbl., | 16.00 | 16.50 | 17.25 | 19.00 | 16.00 | 18.00 | 15.00 | | | | | |
| Lard, per lb., | .11¼ | .11¾ | .11¾ | .13 | .11 | .12 | .09 | .10 | | | .13 | .17 |
| Butter, do | .12 | .20 | .10 | .16 | .10 | .18 | .10 | .16 | .12½ | .18 | .19 | .28 |
| Cheese, do | .08 | .08 | | | .05 | .07 | .06 | .11 | | | .13 | .15 |
| Flour, per bbl., | 4.10 | 7.00 | 4.25 | 6.50 | 4.00 | 5.25 | 2.50 | 5.00 | 3.80 | 4.30 | 4.40 | 5.00 |
| Wheat, per bush., | .85 | 1.33 | .75 | 1.25 | .80 | 1.00 | .60 | .68 | .85 | 1.00 | 1.20 | 1.16 |
| Corn, shelled, per bu., | .70 | .92 | .82 | .90 | .54 | .56 | .39 | .46 | | | .98 | 1.02 |
| Rye, do | .70 | .78½ | .60 | .70 | .48 | .50 | .52 | .53 | .48 | .60 | .84 | .90 |
| Oats, do | .38 | .46 | .40 | .42 | .38 | .40 | .30 | .33 | .35 | .38 | .66 | 1.02 |
| Barley, do | .55 | .65 | | | .40 | .45 | .38 | | .40 | | .75 | |
| Clover Seed, do | 4.20 | 4.50 | 5.00 | | 3.50 | 4.00 | 4.50 | 5.00 | 4.50 | 5.00 | 5.00 | 7.25 |
| Timothy Seed, do | 2.00 | 2.25 | | | 1.75 | 2.25 | 1.25 | 1.37 | 1.50 | 1.75 | | |
| Flax Seed, do | 2.00 | | 1.60 | 1.62½ | 1.00 | 1.12½ | .70 | .90 | | | 2.01 | |
| Hay, per ton, | 8.00 | 9.00 | | | 7.00 | 9.00 | 3.50 | 7.00 | 12.00 | 17.00 | | |
| Wool, per lb., | .27 | .45 | .27 | .45 | .20 | .34 | | | .21 | .24 | .26 | .28 |
| Wood, hard, per cord, | | | | | 4.50 | 5.50 | 4.00 | 6.50 | 4.00 | 4.50 | | |

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